DIVISION OF OIL, GAS AND MINING APPLICATION FOR PERMIT TO DRILL STATEMENT OF BASIS

OPERATOR:	CrownQuest Operating
WELL NAME & NUMBER:	Halls State 5-1
API NUMBER:	43-037-31833
LOCATION: 1/4,1/4 SWNW Sec	e:5 TWP: 33S RNG: 24E 1940 FNL 2080 FEL

Geology/Ground Water:

Significant volumes of high quality ground water are likely to be encountered at this location. A moderately permeable soil is likely to be developed on the Quaternary eolian loess surface deposits in the area. A thin Mancos shale fringe may be encountered below the loess, otherwise, the relatively thin Dakota Sandstone and thicker subjacent Morrison Formation will be encountered first. Two water rights, including one recently filed by this operator, have been filed on two water supply wells within a mile of the location that most likely produce from the Dakota Sandstone. The base of moderately saline ground water in a nearby well was determined to be at an elevation of 4,731 feet. If this is so, it is likely that fresh water may also be found in the Morrison Formation, Entrada Sandstone, and Navajo Sandstone. The proposed drilling, casing and cementing program should adequately isolate any zones of fresh water that may be penetrated.

Reviewer: Christopher J. Kierst Date: 2/15/2004

Surface:

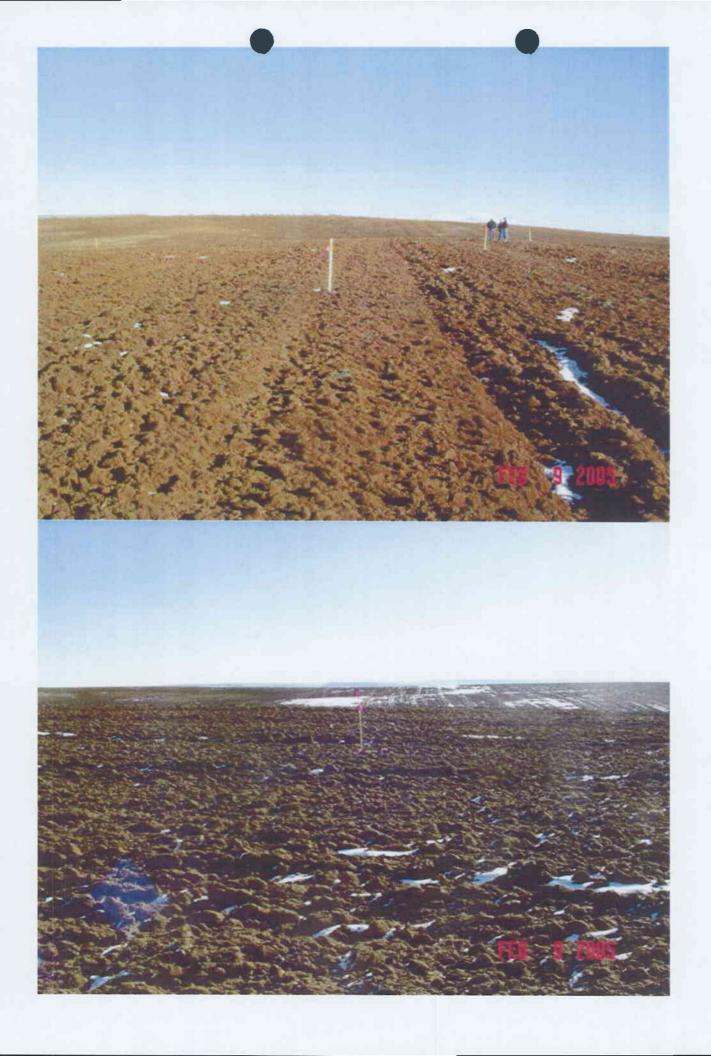
On-site conducted February 9, 2005. In attendance: Bart Kettle (DOGM), Gene Stevenson, Craig Starky (DJ Simmons) and Ken Manchester (DJ Simmons), invited but choosing not to attend Gary Halls (surface owner) and Ed Bonner (SITLA). Proposed location lies within currently produced dry land farmlands. Surface owner requested that top-soil be stockpiled at edges of location for future reclamation via phone conversation. Discussed that surface lands will likely be used for livestock grazing before reserve pit has been closed. Per surface use proposal in Application for Permit to Drill reserve pit will be fenced on three side while well is being drilled, with the fourth side being fenced immediately upon completion of drilling.

Reviewer: Bart Kettle Date: October 20, 2004

Conditions of Approval/Application for Permit to Drill:

- 1. A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.
- 2. Top-soil stockpiled at locations edge for future reclamation.
- 3. Reserve pit fenced on three side during drilling, fourth side fenced upon completion of drilling.







DJ SIMMONS, INC.

1009 Ridgeway Place Suite 200 Farmington, New Mexico 87401

505-326-3753 505-327-4659 FAX info@djsimmonsinc.com www.djsimmonsinc.com January 24, 2004

Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 Box 145801 Salt Lake City, Utah 84114-5801

RE: APD Application
Halls 5-1
Section 5
Township 33 South - Range 24 East
San Juan, Utah

Dear Mr. Doucet

DJ Simmons, Inc. agent for CrownQuest Operating, LLC. is submitting APD for the above mentioned well location. CrownQuest Operating, LLC. Has submitted an Application to Appropriate Water # 09-2151 to secure a temporary permit in order to implement the drilling of the above mentioned well.

As we desire a March 2004 spud date for the oil & gas well, an expeditious approval of the APD would be greatly appreciated.

If I can be of any further assistance please contact me at (505) 326-3753 ext 14.

Craig D. Starkey

Sincerely yours

Program Land Coordinator

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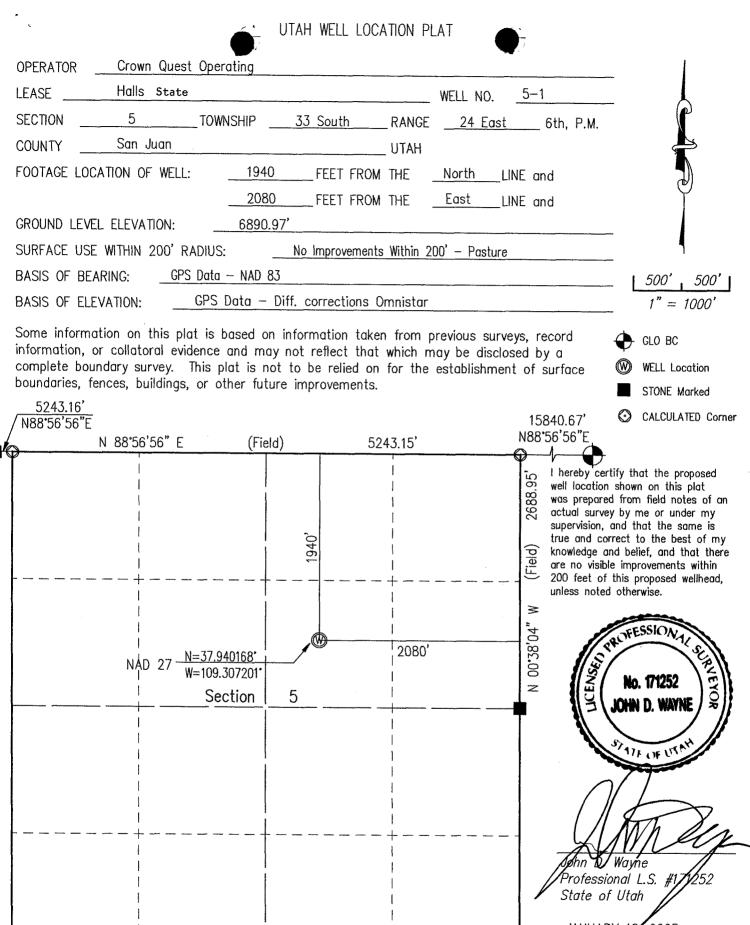
DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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AMENDED REPORT □ (highlight changes)

	APPLICATION FOR	R PERMIT TO	DRILL			5. MINERAL LEASE NO:	6. SURFACE:
4A TVPE 05 150						ML 47962 7. IF INDIAN, ALLOTTEE OR	Fee TRIBE NAME:
1A. TYPE OF WORK: DRILL 🕢 REENTER 🗌 DEEPEN 🗍						N/A	
B. TYPE OF WE		SINC	GLE ZONE	MULTIPLE ZON	E	8. UNIT or CA AGREEMENT I	NAME:
2. NAME OF OPE CrownQues	erator: st Operating, LLC					9. WELL NAME and NUMBER Halls State 5-	
3. ADDRESS OF	OPERATOR:			PHONE NUMBER:		10. FIELD AND POOL, OR W	
303 Wall, S	Ste. 1400 CITY Midland S	TATE TX ZIP 797	702	(432) 685-3116		Wildcat	
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AT PROPOSED	PRODUCING ZONE: 1940 FNL and 2080	JEWL 430	03117	109. 3072	22		
14. DISTANCE IN	MILES AND DIRECTION FROM NEAREST TOWN OR	POST OFFICE;				12. COUNTY:	13. STATE:
6 Miles n	ortheast of Monticello				ŀ	San Juan	UTAH
15. DISTANCE TO	O NEAREST PROPERTY OR LEASE LINE (FEET)	16. NUMBER OF	ACRES IN LEA	SE:	17. NU	MBER OF ACRES ASSIGNED	TO THIS WELL:
	1940'			2080.34 Ac.			N/A
	O NEAREST WELL (DRILLING, COMPLETED, OR R) ON THIS LEASE (FEET)	19. PROPOSED	DEPTH:		20. BON	ND DESCRIPTION:	
Of ELEVATIONS	2910'			9,888		3 0007554 (120,00	00 Blanket)
	(SHOWWHETHER DF, RT, GR, ETC.):	22. APPROXIMA		< MLL START:	23. EST	IMATED DURATION:	
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24.	PROPO	SED CASING AN	ND CEMEN	TING PROGRAM			
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✓ EVIDENC	DE OF DIVISION OF WATER RIGHTS APPROVAL FOR	LISE OF WATER			ביט ואספים	COMPANY OTHER THAN TH	IE I EACH CLASE
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NAME (PLEASE)	Robert R. Griffee, Agent for: (CrownQuest)	TiTLE	Operations Ma	nager		
SIGNATURE	fold.		DATE	1/28/2005			
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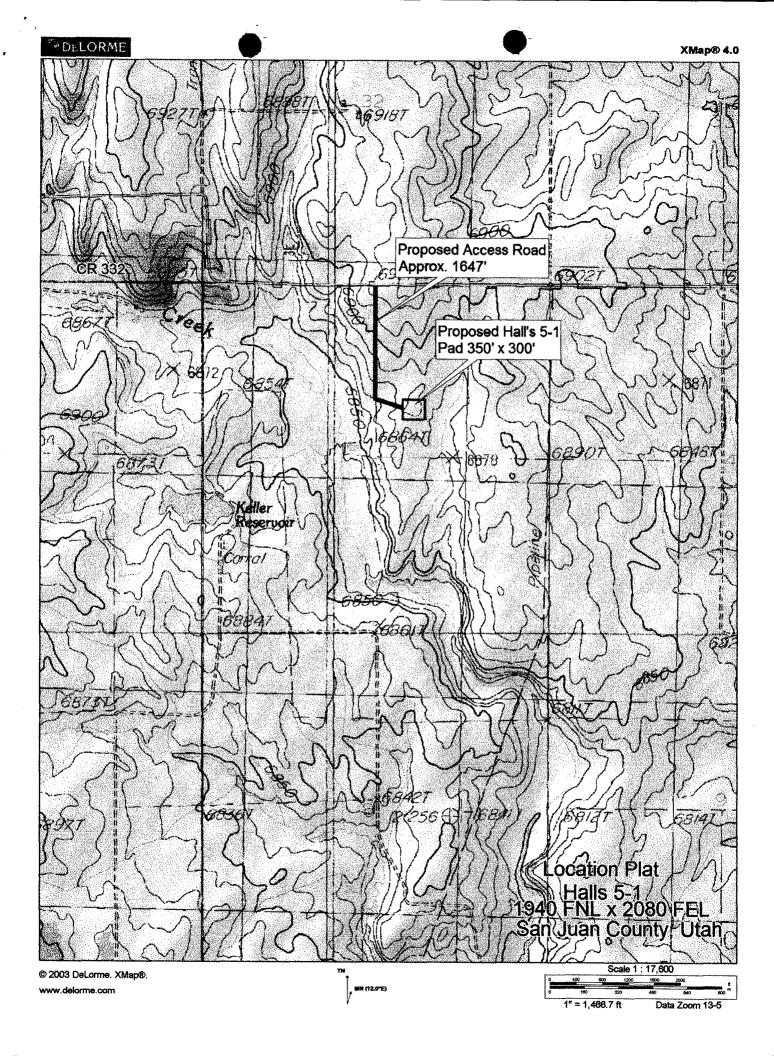


SCALE: 1" = 1000'

JANUARY 18, 2005

Date Surveyed: JANUARY 19, 2005

Date Platted:



STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

	FORM 3
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MINERAL LEASE NO: 1L 47962	6. SURFACE: Fee
IF INDIAN, ALLOTTEE OR N/A	FRIBE NAME:
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Wildcat OTR/QTR, SECTION, TOV	
MERIDIAN: SWN₩ 5 33S	
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San Juan	13. STATE: UTAH
BER OF ACRES ASSIGNED	TO THIS WELL:
DESCRIPTION:	
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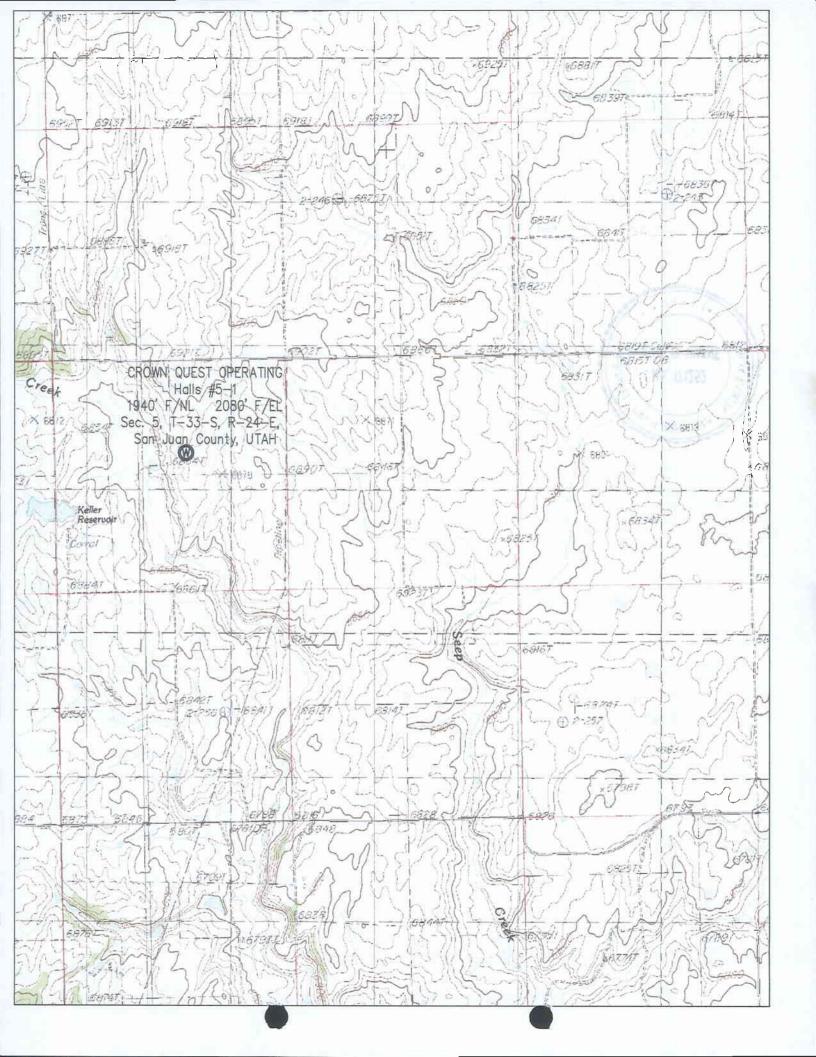
APPLICATION FOR PERMIT TO DRILL					ML 47962	Fee
1A. TYPE OF WO	REENTER		7. IF INDIAN, ALLOTTEE OR	TRIBE NAME:		
B. TYPE OF WELL: OIL 🗹 GAS 🗌 OTHER SINGLE ZONE 🗌 MULTIPLE ZONE					8. UNIT or CA AGREEMENT	NAME:
2. NAME OF OPE	RATOR: st Operating, LLC				9. WELL NAME and NUMBER Halls State 5-	
3. ADDRESS OF	OPERATOR:	TV 70-	PHONE NUMBER:		10. FIELD AND POOL, OR W	
303 Wall, S	te. 1400 CITY Midland S	TATE TX ZIP 79	702 (432) 685-3116		Wildcat 11. QTR/QTR, SECTION, TO	MAICHID DANGE
	1940 FNL and 2080 FWL	V 648	751X 37.940	117	MERIDIAN:	MNSHIP, RANGE,
	PRODUCING ZONE: 1940 FNL and 2080	FIL 450	03174-109.3072	22	SWN 6 338	S 24E P
14. DISTANCE IN	MILES AND DIRECTION FROM NEAREST TOWN OR	POST OFFICE:			12. COUNTY:	13. STATE:
6 Miles n	ortheast of Monticello				San Juan	UTAH
15. DISTANCE TO	NEAREST PROPERTY OR LEASE LINE (FEET)	16. NUMBER O	FACRES IN LEASE:	17. NU	MBER OF ACRES ASSIGNED	TO THIS WELL:
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18. DISTANCE TO APPLIED FOR	O NEAREST WELL (DRILLING, COMPLETED, OR R) ON THIS LEASE (FEET)	19. PROPOSED		20. BOI	ND DESCRIPTION:	
	2910'		9,888	RL	B 0007554 (120,00	00 Blanket)
	(SHOW WHETHER DF, RT, GR, ETC.):		ATE DATE WORK WILL START:	23. ES	TIMATED DURATION:	
	6891 GL	3/18/200			45 days	
PROPOSED CASING AND CEMENTING PROGRAM						
SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUA	JANTITY, Y	TELD, AND SLURRY WEIGHT	
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✓ EVIDENC	E OF DIVISION OF WATER RIGHTS APPROVAL FOR (JSE OF WATER	FORM 5, IF OPERATOR IS PE	ERSON OF	R COMPANY OTHER THAN TH	HE LEASE OWNER
NAME (PLEASE)	Robert R. Griffee, Agent for: (CrownQuest)	Operations Ma	anager		
SIGNATURE	John l.		DATE 1/28/2005			
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API NUMBER ASS	SIGNED: 43-037-31833		APPROVAL:		an Division of	a

(11/2001)

(See Instructions on Reverse Side)

UTAH WELL LOCATION PLAT

OPERATOR Crown Que	est Operating							1
LEASE Halls Stat	te			WELL NO.	5-1			
SECTION 5	TOWNSHIP	33 South	_RANGE	24 Eas	st	6th, P.M.	-	
COUNTY San Juan			UTAH					
FOOTAGE LOCATION OF WEL	L: <u>1940</u>	FEET FROM	THE	North	LINE an	d		
	2080	FEET FROM	THE	East	LINE an	d		
GROUND LEVEL ELEVATION:	6890.9	7'			1			
SURFACE USE WITHIN 200'	RADIUS:	No Improvements	Within 2	00' — Pastu	re			
BASIS OF BEARING:G	PS Data — NAD 83						_ [500', 500'
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boundaries, fences, building	s, or other futur	e improvements.						STONE Marked
5243.16' / N88'56'56"E					158	340.67'	\odot	CALCULATED Corner
N 88'56'56"	E (Field)	52	43.15'		N88°	56'56"E		
NAD 27	N=37.940168* W=109.307201* Section	5	2080'		N 00*38'04" W (Field) 2688.95'	well location was prepare actual surve supervision, true and coknowledge are no visit 200 feet of unless note	n showed from ey by i and to be one of this part of the way in the	A TOP CITATION
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DI SIMMONS, INC.

REMARKS:

1009 Ridgeway Place Suite 200 Farmington, New Mexico 87401

Date: 1/4/1/1/2005
Number of pages including cover sheet: 1/4

Phone: 505-326-3753 FAX: 505-327-4659

To Clint Durorshak	From: Yaig Stank	A
		T

Phone:	801-	538	-3310	

CC	•			
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Urgent

Please Comment For Your Review

Enclosed: Hall's # 5-1 Hz Safety Plan.

Reply ASAP

RECEIVED MAR 0.9 2005

DIV. OF OIL, GAS & MINING

HYDROGEN SULFIDE CONTINGENCY PLAN

Hydrogen Sulfide Contingency Plan Page 1

Valid Only at Time of Printing. Dated 2/22/2005

3/ 15



Company Operation Manager

- 1. The Company Operation Manager will be responsible for notifying and maintaining contact with company managers and supervisory personnel.
- 2. Maintain communication with the location supervisor to proceed with any other assistance that might be required.
- 3. Travel to well location is appropriate.
- 4. Assist location supervisor with all other notifications-both company and regulatory.

Well Specialist (Location Supervisor)

- 1. The location supervisor will confirm that all personnel on location at any time are trained in Hydrogen Sulfide Safety Awareness, are clean shaven and are familiar with safety equipment on-site and have personal Hydrogen Sulfide monitor for their protection.
- 2. Ensure that all safety and emergency procedures are observed by all personnel.
- 3. Make an effort to keep the number of personnel on location to a minimum and to ensure that only essential personnel are on location during critical operations.
- 4. Conduct weekly hydrogen sulfide emergency mock drill.
- 5. Should extreme danger condition exist, the location supervisor will:
 - a. Assess the situation and advise all personnel by appropriate means of communication.
 - b. Be responsible for determining that the extreme danger condition is warranted and the red flag shall be posted at location entrance.
 - c. Go to safe briefing area and give clear instructions relative to hazard on location, and actions for personnel to follow.
 - d. Notify company and regulatory groups of current situation as outlined in company protocol. Follow appropriate emergency procedures for emergency services notification.
 - e. Proceed to rig floor and supervise operations with rig supervisor. Take action to control and reduce the hydrogen sulfide hazard.
 - f. Ensure that essential personnel are properly protected with supplied air breathing equipment and that non-essential personnel are in a muster station free hydrogen sulfide.
 - g. Be responsible for authorizing evacuation of persons/residents in area surrounding the drilling location.

Hydrogen Sulfide Contingency Plan Page 2



- 1. If the Location Supervisor is unable to perform his/her duties, and the alternate representative is also unable or unavailable to perform his/her duties, the rig supervisor-tool pusher will assume command of well site operations and all responsibilities listed above for rig personnel.
- 2.Ensure that all rig personnel are properly trained to work in Hydrogen Sulfide environment and fully understand the purpose of hydrogen sulfide monitors and alarms, and the action to take when alarms visual/audible initiate. Ensure that all crew members that all crew personnel understand the buddy system, safe briefing areas, muster stations, emergency evacuation procedures and individual duties.
- 3. Should an extreme danger operational condition arise, the rig supervisor-tool pusher shall assist the Location Supervisor by:
 - a. Proceeding to the rig floor and assist in supervising rig operations.
 - b. Ensure that only essential personnel remain in the hazardous areas.
 - c. Ensure that all personnel that remain in hazardous area, wear supplied air breathing equipment until notified all is "CLEAR" of any toxic gases.
 - d. Assign rig crew member or other service representative to block entrance to location. No unauthorized personnel will be allowed entry to location.
 - e. Help to determine hazardous "danger zones" on location using portable detection equipment.
 - f. Position electric fans to move gas in any high concentration areas with Continuous monitoring of the area.

SAFETY CONSULTANT

- 1. During NORMAL operations (no hydrogen sulfide present), the safety consultant will be responsible for the following:
 - a. Ensure that all well site safety equipment is in place and operational.
 - b. Ensure that all well site personnel are familiar with location safety layout and operation of all safety equipment.
 - c. Ensure that all well site personnel are adequately trained in Hydrogen Sulfide Safety Awareness and are cleaned shaven.
 - c. Assist location supervisor with weekly hydrogen sulfide emergency mock drill.
- 2. When an operational condition is classified as extreme danger, the safety consultant will be responsible for the following:
 - a. Account for all well site personnel.
 - b. Assess any injuries and direct first aid measure.
 - c. Ensure that all safety and monitoring equipment is functioning properly and available.

Hydrogen Sulfide Contingency Plan Page 3

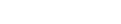
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- d. Monitor the safety of well site personnel.
- e. Maintain a close communication with the location supervisor.
- f. Be prepared to assist location supervisor with support of rig crew or other personnel using supplied air breathing equipment.
- g. Be prepared to assist location supervisor with emergency procedures.
- h. Be prepared to assist with evacuation of any area residents or other personnel working in the immediate area.

All Personnel

- 1. Always be alert for possible Hydrogen Sulfide visual/audible alarms.
- 2. Be familiar with location of Safe Briefing Areas and Muster Stations.
- 3. Be familiar with location of and operation of all air supplied breathing equipment.
- 4. Familiarize yourself with nearest escape routes for safe evacuation
- 5. Be aware of prevailing wind direction, any changes in wind direction, or absence of wind by checking the wind socks placed around location, and be aware of uphill direction.
- 6. If hydrogen sulfide lights and/or siren initiates "STAY CALM" don escape breathing systems and follow directions of person in charge and proceed to briefing area/muster station. Do not initiate rescue until directed by person in charge.
- 7. Essential personnel shall don Self-Contained Breathing Apparatus (SCBA) and work using the "BUDDY SYSTEM" will rescue any victims and work to control Hydrogen Sulfide Release.
- 8. Non-essential personnel shall evacuate to the appropriate safe briefing area using escape breathing systems. Wait there for further instructions from person in charge.



RIG LAYOUT

Location

- 1. All supplied air breathing equipment and hydrogen sulfide monitors will be rigged up prior to starting any operation suspected to encounter hydrogen sulfide. The rig crews and other service personnel will be trained at this time. This will allow sufficient time for all rig crews to be trained and all safety equipment in place and functioning when the first sour zone is actually encountered.
- 2. The rig will be situated on location to allow for the prevailing winds to blow across the rig toward the circulation tanks or at right angles to the lines from the B.O.P. s to the circulation tanks.
- 3. The entrance to the location is designed so that it can be barricaded if a hydrogen sulfide emergency condition arises. An auxiliary exit route will be available so that in case of an emergency, a shift in wind direction would not prevent escape from the location.
- 4. A minimum of 2 safe briefing areas/muster stations shall be designated for assembly of personnel during emergency conditions. These will be located at least 150 feet or as practical, from the well bore and in such a location that at least one area will be upwind of the well at all times. Upon recognition of an emergency situation, all personnel will be trained to assemble at the designated briefing area for instructions.
- 5. Smoking areas will be established and "NO SMOKING" signs will be posted around the location.
- 6. Reliable 24 hour radio or telephone communications will be available.
- 7. A hydrogen sulfide sensor will be rigged up at the manifold to the choke system.
- 8. All equipment that might come into contact with hydrogen sulfide drill pipe/work strings, test tools, blowout preventer, casing, choke system will meet metallurgy requirements for hydrogen sulfide service.
- 9. The rig will have a continuous electronic hydrogen sulfide detection system that automatically will activate visible and audible alarms if hydrogen sulfide is detected. The visible light will activate at 10 ppm H₂S, and audible siren will activate if 15 ppm or higher concentration is present. There will be at least 4 H₂S sensors in place on the rig. They will be located to detect the presence of hydrogen sulfide in areas where it is most likely to come to the surface. The sensor head locations will be: 1) rig floor by driller's console, 2) substructure area near the bell nipple, 3) two additional sensors will be positioned at the discretion of the location supervisor. At least one light and one siren will be placed on the rig so that the presence of hydrogen sulfide. The light and siren will be strategically placed to be visible to all personnel on the location site. Additional alarm

Hydrogen Sulfide Contingency Plan Page 5 lights & sirens may be added to ensure that all personnel on the drill site are able to visibly see the lights from anywhere on location.

- 10. The H2S detection equipment will be calibrated as recommended by the manufacturer.
- 11. At least 2 windsocks will be placed around the location site to ensure that everyone on the location can readily determine wind direction. One windsock will be mounted on or near the rig floor to be readily visible to rig crews when tripping pipe.
- 12. All respiratory protective equipment will be NIOSH/MSHA approved positive pressure type and maintained according to manufacturer's guidelines. All breathing air used for this equipment must be tested every 6 months and approved GRADE D compressed breathing air.
- 13. Both 30 minute self-contained breathing apparatus (SCBA) and work units with escape cylinders will be available on location. There will be sufficient numbers of this supplied air breathing equipment on location to ensure that all personnel on location have 1 piece of equipment available to them. All respiratory protective equipment will use nose cups to prevent fogging in temperatures below 32 degrees F. Spectacle kits will be available for personnel that require corrective lenses when working under mask.
- 14. Hydrogen Sulfide mock drills will be conducted at least weekly to ensure that all well site personnel are competent in emergency donning procedures. These drills will be recorded in the daily log.

SAFETY PROCEDURES

Training

All personnel who come on the location must be properly trained in hydrogen sulfide safety awareness. Must be clean shaven and have a Hydrogen Sulfide Safety Awareness card that has not expired.

Training topics shall include at a minimum:

- a. hazards and characteristics of hydrogen sulfide, nitrogen, and oxygen deficient atmospheres and symptoms of exposure to these gases.
- b. proper use, care and limitation of respiratory protective equipment with hands on practice.
- c. use of both fixed and portable detection monitors.
- d. work practices to reduce opportunities for hydrogen sulfide exposure as well as confined space procedures.
- e. first aid for toxic gas exposure and resuscitation equipment.
- f. the buddy system

Hydrogen Sulfide Contingency Plan Page 6

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- g. emergency evacuation procedures
- h. a review of the contingency plan for the well

In addition to hydrogen sulfide safety awareness personnel need to be currently trained in adult CPR/First Aid/Bloodborne Pathogens.

OPERATING CONDITIONS

Operating Conditions

A sign with three color flag warning system will be used to notify personnel approaching the location under what condition the location is operating at. This system will be in compliance with BLM standards 00#6 and industry standards both state and federal.

Green Flag - potential danger

Yellow Flag - moderate danger

Red flag - extreme danger -do not approach if red flag is flying.

Evacuation Plan

If there is residents/business/work going on within a 2 mile radius of the location site, they will be notified and asked to evacuate.

Evacuations will be initiated by the company managers/supervisors and coordinated with appropriate emergency services.

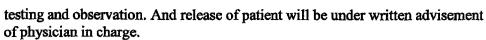
All regulatory agencies will be notified as soon as possible.

Emergency Rescue Procedures

Well site personnel should not attempt emergency rescues unless they have been properly trained. a trained person who discovers another person overcome by hydrogen sulfide should not attempt **RESCUE** without donning a self-contained breathing apparatus (SCBA). When making an emergency rescue always use the following procedures:

- 1. Don self-contained breathing apparatus (SCBA) before attempting a rescue.
- 2. Remove the victim using the buddy system, from the contaminated area to an area free of toxic gas by going upwind or cross wind and personal monitors have stopped alarming before removing your SCBA.
- 3. Check victims Airway, Breathing, and Circulation (ABC's) and provide appropriate care using barrier devices such as micro-shield, resuscitation pocket mask, or a Bag-valve-mask w/oxygen if available and appropriately trained.
- 4. As soon as emergency personal arrive patient care will be given to them.
- 5. Any personnel who experienced hydrogen sulfide exposure will be transported via appropriate transportation to the closest hospital/clinic/doctors office for further

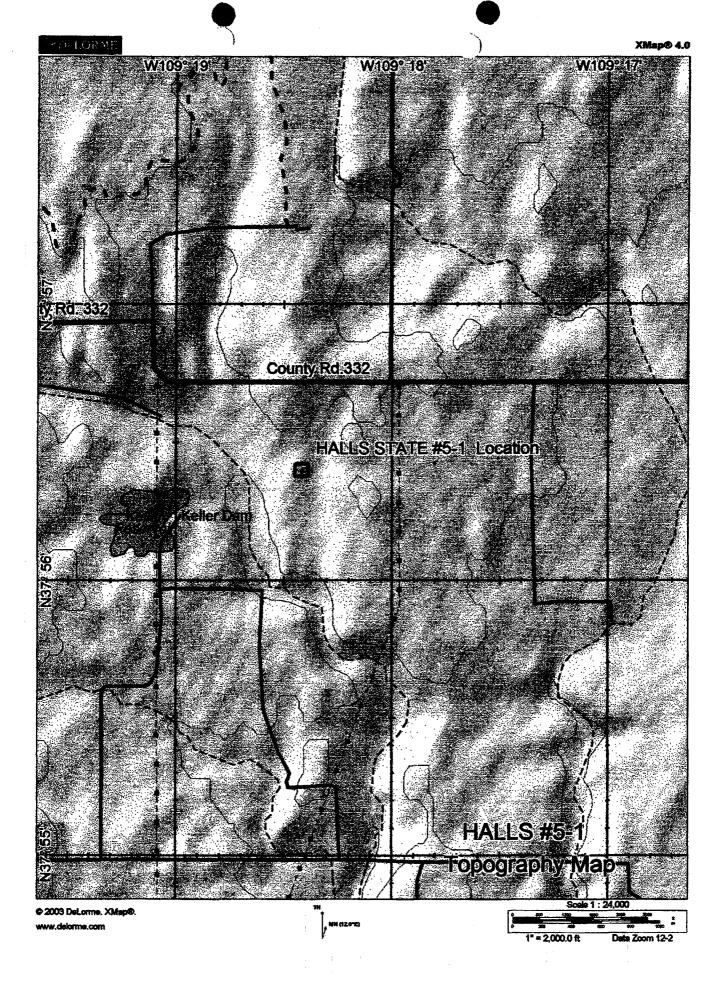
Hydrogen Sulfide Contingency Plan Page 7



6. All contract companies will be advised and will cooperate and work with the accident investigation and be notified of any accident investigation results.

HYDROGEN SULFIDE SAFETY EQUIPMENT

QUANITY	DESCRIPTION
1	Safety trailer with cascade system consisting of (8) 347 cu.ft. compressed
	air tanks with high-pressure regulators, certificate available.
1	1000 ft. low pressure airline hose with Hanson locking fittings, rigged-up
ļ	with manifolds to supply breathing air to the personnel on the rig floor,
	substructure, derrick, shale shaker area, and mud mixing areas.
6	Self-contained breathing apparatus (SCBA)
6	Emergency Escape Breathing Apparatus (EEBA)
1	4-channel continuous electronic hydrogen sulfide monitor with
	visual/audible alarm. Span and set at 10-15 ppm by a certified technician
	and calibration sheet available as well as sticker on unit.
1	Gastec and/or detection pump unit with tubes to test for hydrogen
	sulfide and sulfur dioxide.
1	First aid kit
1	Backboard with straps and headblocks, C-collar and tape
2	Windsocks with poles
1	Well condition sign with 3 flag system
2	Safe briefing area/muster station signs
1	Fire blanket
1	20# fire extinguishers
1	LEL/O2 handheld monitor calibration sheet available as well as sticker on
	unit.
1	Eyewash station
1	Microsheild/resesitation pocket mask/bag-valve mask with O2 inlet
2	Tanks oxygen with tubing and adult nasal cannulas, adult non-rebreathers.
1	Local emergency phone numbers for police/fire/ems with township and
	range, longitude and latitude posted inside the trailer on the wall in plain
	view.
1	Bloodborne pathogen kit



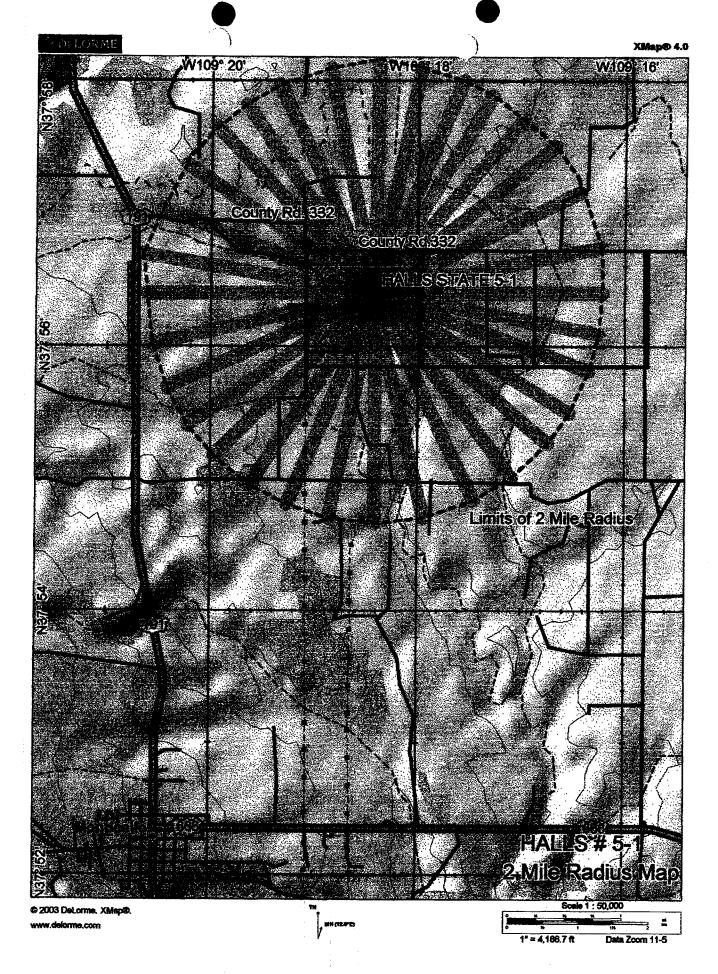
INFORMATION SHEET

Location Name:		
Rig Name and Number:		
Company Phone Number:		
Location Supervisor:		
Rig Supervisor/Tool Pusher:		
Safety Consultant:		
Township and Range:		
Longitude and Latitude:		
Check List		
List of Emergency Numbers		
Weather Report		
Calculation of ROE		
Topography of Area		
List of Residents and Business in two mile r	adius	

Doctor:

Bureau of Land Management, Utah	801-539-4001
Utah Department of Public Safety	200 000 0000
Navajo Police Department, Shiprock, NM	505-368-1350
Utah Oil & Gas Division	801-538-5277
Utah Poison Control	800-222-1222
Utah Department of Wildlife Resources	801-539-4001
Utah State OSHA (Occupational Safety Health Administration)	801-530-6855
"One Call", Statewide ("Call Before You Dig")	
Poison Control	800-432-6866
Division of Emergency Services & Homeland Security	
San Juan County, UT Sheriff, Monticello, UT	
Utah State Highway Patrol, Moab, UT	435-259-5441
CHEMTREC	800-724-9300





INFORMATION SHEET

Location Name: Holls 5-1	
Rig Name and Number: 75 Herson	
Company Phone Number:	
Location Supervisor: Robert Griff	ex / Gan Dutt
Rig Supervisor/Tool Pusher:	
Safety Consultant:	
Township and Range: Township 3:	3. South, Range ZAE
Longitude and Latitude: 109° 181 25.0	

Check	List
	List of Emergency Numbers
TBD.	Weather Report
	Calculation of ROE
~	Topography of Area
	List of Residents and Business in two mile radius
62	\$ 0
108	60

D.J. SIMMONS, INC.

Drilling Plan

Well Name:

Halls State 5-1

Surface Location:

1940' FNL x 2080' FEL, Section 5, T33S, R24E

San Juan County, Utah

Target Formation:

Lower Ismay, Miss Leadville Fm, Dev. McCracken SS

Elevation:

6891' ungraded GL; est KB (+16') = 6922'

Formation	Тор	Thickness	Probable Content
Soil	Surface	(10')	
Dakota	10'	(300')	sandstone; possible wtr
Morrison	310'	(710')	intbdd sh/ss
Summerville/Wanakah	1020'	(70')	red sh/sltst
Entrada Ss	1090'	(166')	potential fresh water
Carmel Fm	1256'	(40')	red sh/sltst
Navajo Ss	1296'	(380')	potential fresh water
Kayenta Fm	1676'	(206')	red ss
Wingate Ss	1882'	(270')	potential fresh water
Chinle Fm	2152'	(510')	vari-color shale
Shinarump Ss	2662'	(84')	gas/water
_Moenkopi Fm	2746'	(50')	brn-red sltst/sh
Cutler (top of Permian)	2796'	(1810')'	prpl crs ss/sh; frs wtr
Honaker Trail (top of Penn)	4606'	(793')	ls; potential gas, brine
La Sal Marker	5399'	(220')	ls; poss o/g sho
Hatch	5619'	(160')	ls; poss o/g sho, brine
Paradox Shale	5779°	(6')	blk sh
Upper Ismay	5785'	(55')	gas/oil/brine
Hovenweep Shale	5840'	(10')	blk sh
Lower Ismay	5850'	(25')	gas/oil/brine
Top of Porosity	5875'	(79')	gas/oil/brine
Gothic Shale	5954'	(40')	blk sh
Desert Creek	5994'	(64')	gas/oil/brine
Pdx salt (LDC salt)	6058'	(1930')	intbdd salt, anhy, blk sh
Bs Pdx salt	7988'	(230')	anhy; dk dolo; blk sh
Miss. Leadville Fm.	8218'	(420')	Ls/dolo (O&G zone)
Devonian Ouray Ls.	8638'	(80')	tite Ls/dolo
Elbert Fm.	8718'	(150')	grn/red calc sh/ss
McCracken Ss Mbr.	8868'	(90')	qtz ss to dolo ss (O&G)
Unconformity		****	
Cambrian Maxfield Dolo.	8958'	(400')	Dolo
Undiff. Ophir/Tintic	9358'	(480')	Intbdd shale/ss (O&G)
Precambrian basement	9838'	(50')	Grnt/meta
TD	9888'		PCb basement

Logging Program: Density/Neutron, Induction, PEF from 6058' to surface casing shoe and

Density/Neutron, Induction, PEF from TD to 6058'.

Drilling Fluid Program:

Interval	Fluid Type	Weight	Viscosity	Fluid Loss
Conductor				
0' - 250'	fresh water spud mud	8.4 - 9.0 ppg	30 - 50 sec	no control
Surface	-	110		
250' - 2250'	fresh water/gel/lime/polymer	8.4 - 10 ppg	30 - 50 sec	no control
Production		110		
2250' - 6058'	fresh water/gel/lime/polymer	8.4 - 9.5 ppg	$30 - 50 \sec$	10 - 12
Production Lin		110		
6058' - 9888'	saturated salt/gel/polymer	10.5 - 14 ppf	50 - 100 sec	6 - 12

Casing Program:

Interval	Hole Diameter	Csg Size	Wt.	Grade Thread
Conductor				
0' – 250'	17 1/2"	13 3/8"	48 ppf	H-40 STC
Surface			• •	
0' - 2250'	12 1/4"	9 5/8"	36 ppf	J-55 STC
Production			~ ~	
0' - 6058'	8 3/4"	7"	23 ppf	L-80 LTC
Production Li	ner			
6000' - 7560'	6 1/4"	4 1/2"	11.6 ppf	P-110 LTC
7560' – 7988'	6 1/4"	4 1/2"	13.5 ppf	P-110 LTC
7988' – 9888'	6 1/4"	4 1/2"	11.6 ppf	N-80 LTC

Tubing Program: 0 – 9800°, 2 3/8°', 4.7 ppf, N80, EUE

BOPE and Wellhead Specifications and Testing:

From conductor casing shoe (250') to 2250': 13 5/8", 3000 psi threaded casing head with two 2" outlets. 13 5/8", 2000 psi double gate BOP and 2000 psi choke manifold (see figures 1 and 2). Pressure test BOPE to 2000 psi and 13 3/8" Conductor casing to 600 psi prior to drilling casing shoe.

From surface casing shoe (2250') to 6058': 9 5/8", 3000 psi weld on casing head. 9 5/8", 3000 psi double gate BOP. 3000 psi choke manifold. (see figures 3 and 4). Pressure test BOPE to 3000 psi and 9 5/8" Surface casing to 1500 psi prior to drilling casing shoe.

From 6060' to TD (9888'); 9 5/8", 3000 psi x 7", 5000 psi casing head. 7 1/16", 5000 psi double gate BOPE and annular BOP. 5000 psi choke manifold (see figures 5 and 6). Pressure test BOPE to 5000 psi and 7" casing to 2500 psi prior to drilling casing shoe.

For completion operations: $5 \frac{1}{2}$ " x 2 3/8", 3000 psi tree assembly. 7 1/16", 3000 psi double gate BOP system. 3000 psi choke manifold (see figures 7 and 8). Pressure test 4 ½" liner to 3500 psi prior to acidizing.

General Operation:

- Actuate pipe rams once each day during drilling operations. Actuate blind rams once each trip.
- An upper Kelly cock valve, with handle, will be available on the rig floor to fit each drilling string.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in the daily drilling report.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing Program:

13 3/8" Conductor Casing String: Run casing with saw tooth guide shoe on bottom, insert float valve one joint from bottom, and install bowspring centralizers as per Onshore Order #2. Cement to surface with 300 sks class 'G' with ½ #/sk celloflake and 2% CaCl2 (348 cf slurry, 100% excess to circulate to surface). Perform top job if necessary.

9 5/8" Surface Casing String: Run casing with swirl pattern guide shoe on bottom and non-differential fill float collar one joint from bottom. Install bowspring centralizers as per Onshore Order #2 (one centralizer in the middle of the first joint, one centralizer every other collar for the next three collars, and one centralizer inside the conductor casing shoe. Cement to surface with 450 sks of 65/35 poz + 6% gel + 6 #/sk gilsonite + .25 #/sk celloflake, followed by 100 sks class 'G' neat + 2% CaCl2 (904 cf slurry).

7" Production Casing String: Run casing with float shoe on bottom, float collar one joint from bottom. Install one centralizer in the middle of the first joint, one on every other collar from 6058' to the top of the Honaker Trail formation, and one inside the surface casing shoe Cement with 315 sks 65/35 poz + 6% gel + 5#/sk gilsonite + ½ ks celloflake + fluid loss additive followed by 330 sks class 'G' neat + fluid loss additives. Precise slurry volumes to be calculated from open hole log caliper plus 25% excess. Top of cement calculated to be at 2150'.

4½" Production Liner: Run liner with float shoe on bottom, float collar one joint from bottom. Top of liner hanger to be installed at 6000' (below the Desert Creek porosity, if found). Install one centralizer in the middle of the first joint, one on every other collar from TD to 6058', and one inside the 7"casing shoe, under the liner hanger. Cement with 660 sks of 18.6 ppg DensCRETE with CemNET at 1 #/bbl. Precise slurry volumes to be calculated from open hole log caliper plus 50%.

Special Drilling Operations:

1. Testing

Possible 120 ft of Full-diameter core from 5850' – 5970'.

Probable DST: 5840' – BH (est 5900').

Possible DST's: 8218' - 8620' and 8868' - 8958'

- 2. In a recent, nearby Barker Creek test, mud weights of 11 ppg were used to control bottom hole pressure in the cycle 10 and 11 shales. These shales are interbedded in the salt section and are often highly fractured and capable of producing a high pressure kick. History shows at least one rig has been burned down after taking a kick in these shales. Encountering H2S is also a possibility in this area when drilling below the Desert Creek. In calculating the potential burst pressures of an 11 ppg kick at 7800', and assuming an evacuated casing string, the 7" casing would need to have a yield pressure greater than 5354 psi, using a 1.2 safety factor. In the procedure above 7", 23 ppf, L80 was selected for burst and H2S considerations.
- 3. The reserve pit needs to be large enough to handle water generated from water flows which can be encountered while drilling the 12 ½" surface hole.
- 4. A 5000 psi BOP system and well head is sufficient for the anticipated bottom hole pressures while drilling below the Desert Creek formation.

The casing design will not accommodate significant amounts of H2S and CO2. Production rates from the Leadville or McCracken formations will be limited by the 2 3/8" tubing. If economic production is encountered in these zones, there is a high probability of finding H2S and CO2 in significant concentrations. This well is designed only to test these deeper horizons and not produce them in the long term, unless H2S and CO2 concentrations are minimal.

Additional Information:

- This well is designed to be completed for long term production in the Ismay and/or Desert Creek formations.
- A fresh water pressure gradient (.433 psi/ft) is anticipated, except in the interbedded shales found in the salt section. Mud weights as high as 14 ppg may be required to control formation pressure in the interbedded shales. Adequate weighting material will be kept on location to maintain mud weight.
- LCM will be added to the mud system as required to maintain circulation.
- Estimated formation pressures:

Ismay
Desert Creek
Interbedded Shale
McCracken
2540 psi
2590 psi
5000 psi
3900 psi

Completion Information:

The completion procedure will be prepared after open hole logs are analyzed. The well will probably be completed in the Ismay formation by acidizing.

Prepared by: Robert R. Griffee

Operations Manager Agent for CrownQuest 1/24/05

Date:

Drilling Procedure

Prepared For: CrownQuest Operating, LLC

Prepared By: Robert R. Griffee

Operations Manager D.J. Simmons, Inc.

01/11/05

Basement Test Wildcat Halls State 5-1 1940' FNL x 2080' FEL Section 5, T33S, R24E San Juan County, Utah

Ground Elevation - 6891'

This drilling program has been prepared using the Geological Preliminary Prognosis by Gene Stevenson, dated 12/15/04.

General Drilling Procedure

- 1. Construct Location and Reserve pit. Reserve pit should be at least 60' x 100' x 8' (see Note #1). Line pit as required by Utah State stipulations (they may require bentonite lining). Construct flare pit with drain ditch to reserve pit. Install and test rig anchors. Location dimensions will depend on selected drilling contractor.
- 2. MIRU drilling rig.
- 3. Spud 17 ½" conductor hole. Use fresh water, gel, lime, spud mud. Keep well bore deviation to a minimum, 1 degree or less at 250' with dog-leg severity 1 degree per 100 feet or less. Ledges are common and key seating or difficulty in running casing may be prevented by reaming through ledges. Drill hole to fit casing.
- 4. Run 13 3/8", 48 ppf, H40 conductor pipe to 250' +/-. Install saw tooth pattern guide shoe on bottom and insert float baffle one joint from bottom. Install centralizers as per Utah State stipulations (1 centralizer in the middle of the first joint and one centralizer every collar thereafter).
- 5. Cement to surface with Class 'G' with 2% CaCl2 and ¼ lb/sk celloflake. Slurry volume is calculated to be 300 sks. Adjust slurry volume as necessary if lost circulation is encountered (unlikely). Perform top job if needed.
- 6. Insure cement has been in place a minimum of 8 hours (or as indicated by service company test data) before drilling out. Weld on flow nipple while WOC. NU 13 5/8", 2000 psi BOPE. Pressure test BOPE to 2000 psi and conductor casing to 600 psi prior to drilling casing shoe.
- 7. Drill out of surface casing with a 12 ¼" bit. Drill 12 ¼" hole to 2250', 50' +\into top of Chinle formation (note: should observe mud color change to red when
 drilling into the Chinle). Use gel/lime/polymer mud. Water flows could be
 encountered requiring mud weights as high as 10.8 ppg for control. Depending

- on severity and bottom hole pressure of water flow, weight up mud system with either barite or production brine. Maintain well bore deviation at 3 degrees or less at 2250°, with maximum deviation changes of 1 degree/100 ft.
- 8. Run 9 5/8", 36 ppf, J55, LTC surface casing to 2250'. Use guide shoe on bottom and float collar (not differential fill) on top of first joint. Centralize with one centralizer in the middle of the first joint and one centralizer every other collar for the next 3 centralizers, and one centralizer @ +/- 160', for a total of 5 centralizers (or as per Utah State stipulations).
- 9. Cement to surface with 450 sks of 65/35 poz + 6% Gel + ¼ #/sk celloflake + 6 #/sk gilsonite, tailed with 100 sks Class 'G' + 2 % CaCl2.
- 10. Cut off 13 5/8" casing head. Install 9 5/8", 3000 psi, weld on, casing head. NU 3000 psi BOPE. BOPE to consist of blind ram, pipe ram, and choke manifold. Pressure test BOPE to 3000 psi and surface casing to 1500 psi prior to drilling casing shoe.
- 11. Drill out of intermediate casing with an 8 3/4" bit (see note #3). Drill 8 3/4" hole through Desert Creek formation to 6058'. Use fresh water/polymer mud system. Make up fluid should consist of fresh water, adding production brine if needed to control mud weight when nearing Desert Creek horizon. Keep mud weights as light as possible for DST testing. Maintain well bore deviation at 6 degrees or less at 6058', with maximum deviation changes of 1 degree/100 ft. Rig up mud loggers at 2400' (confirm with geologist). DST's are possible in the Honaker Trail, Hatch, Ismay, and Desert Creek formations. Rig up DST lines and tank. Circulate and condition hole. Short trip as required. TOH.
- 12. Log and DST as specified by Geologist
- 13. TIH and condition well bore. Short trip as necessary.
- 14. Run 7", 23 ppf, L80 production casing to TD (6058'). Hang in full tension. Use guide shoe on bottom and differential fill float collar on top of first joint. Centralize with one centralizer in the middle of the first joint and one centralizer per collar up through the upper Ismay formation (or as per Utah State stipulations).
- 15. Cement to 2150' (TOC inside 9 5/8" surface casing) with 315 sks 65/35 poz + 6% Gel + 6 #/sk gilsonite + ½#/sks celloflake + fluid loss additive followed by 330 sks Class 'G' neat + fluid loss additives. The slurry volume of the Class 'G' neat should come up to above the top of the Honaker Trail formation. Calculate slurry volumes after receiving caliper from loggers. (See note #4)
- 16. ND BOP's. NU 9 5/8", 3000 psi x 7", 5000 psi casing head. Land casing in slips. Cut off casing. NU 7 1/16", 5000 psi (as a minimum) BOPE. BOPE to consist of blind ram, pipe ram, hydril, and choke manifold. Pressure test BOPE to 5000 psi and surface casing to 2500 psi prior to drilling casing shoe.
- 17. Insure that cement has set up for at least 12 hours prior to drilling out. RU full H2S detection and escape package before drilling out.
- 18. Drill out of intermediate casing with a 6 1/4" bit (see note #3). Drill 6 1/4" hole to basement to 9888'. Use saturated brine mud system. A tandem split flow linear motion shaker capable of removing solids at a 400 gpm circulation rate is recommended for solids control in this interval. Because the makeup fluid is relatively inexpensive for the saturated brine system, dumping pits should be a

more cost effective solids control technique than adding centrifuges or mud cleaners. If the salts flow and stick the drill string, use a fresh water slug, as a last resort before fishing, to get the drill string free. It is also recommended to use the minimum circulation rate, needed to clean the hole, to help avoid well bore enlargement in the salts. Over pressured shales may be found interbedded in the salt section. If fractured, these shales can kick requiring mud weights as high as 14 ppg to control them. Maintain well bore deviation at 9 degrees or less at 9888', with maximum deviation changes of 1 degree/100 ft. DST's are possible in the interbedded shales, Leadville, and McCracken formations. Rig up DST lines and tank. Circulate and condition hole. Short trip as required. TOH.

- 19. Condition hole. Short trip as necessary. TOH.
- 20. Log and DST as specified by Geologist.
- 21. If the well is determined to be productive proceed to step 22. Other wise, plug and abandon the well as per BLM and State of Utah stipulations.
- 22. TIH and condition well bore. Short trip as necessary.
- 23. Run 4 ½", 11.6 and 13.5 ppf, N80 and P110, LTC production liner to TD (see casing design summary). The top of the liner hanger is to be below the porosity in the Desert Creek formation inside the 7" casing at approximately 6000'. Install guide shoe on bottom and differential fill float collar on top of first joint. Centralize with one centralizer in the middle of the first joint and one centralizer per collar into the 7" casing (or as per BLM stipulations).
- 24. Cement to the liner top with Schlumberger designed salt slurry insert when recommendation comes. Calculate slurry volumes after receiving caliper from loggers.
- 25. Release drilling rig. Prepare completion procedure.

Notes

- 1. In a recent, nearby Barker Creek test, mud weights of 11 ppg were used to control bottom hole pressure in the cycle 10 and 11 shales. These shales are interbedded in the salt section and are often highly fractured and capable of producing a high pressure kick. History shows at least one rig has been burned down after taking a kick in these shales. Encountering H2S is also a possibility in this area when drilling below the Desert Creek. In calculating the potential burst pressures of an 11 ppg kick at 7800', and assuming an evacuated casing string, the 7" casing would need to have a yield pressure greater than 5354 psi, using a 1.2 safety factor. In the procedure above 7", 23 ppf, L80 was selected for burst and H2S considerations.
- 2. The reserve pit needs to be large enough to handle water generated from water flows which can be encountered while drilling the 12 1/4" surface hole.
- 3. A 5000 psi BOP system and well head is sufficient for the anticipated bottom hole pressures.

Note; this casing design will not accommodate significant amounts of H2S or CO2. Production rates will be limited by the 2 3/8" tubing. If find Leadville production is found, there is a high probability of getting H2S and CO2. Unocal used a lot of nickle alloy pipe up in Lisbon valley. Kinder Morgan also uses these high grade tubulars. I am viewing this as a test well, and not a viable producer, in the Leadville. Until you have a discovery, I am sure that CrownQuest will not want to invest in nickel alloy tubulars on a deep wild cat like this.

Prepared by: Robert R. Griffee

D.J. Simmons, Inc.

01/11/05



CROWNQUEST OPERATING, LLC

January 11, 2005

Mr. Gary Halls P.O. Box 428 Monticello, UT 84535

Re:

Halls State 5-1 well Section 5, T-33-S, R-24-E San Juan County, Utah

Dear Mr. Halls:

This letter, when accepted by you will confirm the agreement between yourself and CrownQuest Operating, LLC ("CrownQuest") concerning the use of the above captioned surface for drilling purposes under the following terms:

- 1. CrownQuest will pay you and as surface damages for roads and drilling pads.
- 2. In the event of production, CrownQuest shall fence the production facilities. In addition, it will install a cattle guard and locked gate at the entrance of the lands from the county road.
- 3. CrownQuest will pay for any buried pipeline laid that is not within the road right of way. All pipelines will be buried a minimum of 3 feet below the surface.
- 4. In the event CrownQuest drills a water well on the lands, you shall have the right to takeover said well after CrownQuest has discontinued its use at your sole cost and expense. It is understood however, that in the event you takeover the well, CrownQuest shall have the continuing right to use the well from time to time for its drilling and/or production operations for a period of five (5) years from the date the well is drilled.
- 5. CrownQuest agrees, upon completion of any operation, to clean up the premises and remove all debris and equipment which CrownQuest has placed on the lands except for equipment needed for the operation of producing wells, which shall be removed within six (6) months after a well permanently ceases to produce.

6. All buried pipelines and pits used in connection with drilling operations shall be constructed in such a manner that when the drilling operations are completed, the topsoil can be restored to the surface.

CrownQuest

- 7. In the event CrownQuest drills a water well as provided for in paragraph 4 of this agreement and has a existing water well on the Jesseson State 4-1 lease, upon request, CrownQuest will within six months of the completion or abandonment of the Halls State 5-1 well cap the water well from either the Halls State 5-1 well or the Jesseson State 4-1 well.
- 8. Subject to regulatory approval, CrownQuest agrees to cut off the easing in each plugged well at least three feet below the surface of the ground and to level the surface of the ground.

Please signify your acceptance of this agreement by signing in the space provided below and returning a copy of this letter agreement.

Very truly yours,

AGREED TO AND ACCEPTED this / 9_ day of January, 2005.

Gary Halls

CrownQuest Operating, LLC

P.O. Box 2990 303 W. Wall, St. Midland, Texas 79702 432-685-3116

State Of Utah Waste Management Plan

METHODS OF HANDLING WASTE MATERAILS

Drilling & Completing Operations

- A. Drilling cuttings: The drilled cuttings will be deposited in the reserve pit.
- B. Drilling fluids, including any salts and or chemicals, utilized in the mud system will be contained in the reserve pit. The reserve pit will be designed to prevent the collection of surface runoff
- C. Reserve Pit Closure: The reserve pit will be closed within one year following the drilling and completing of the well. Liquids in the reserve pit will be left to evaporate or percolate. If removal of liquids is necessary, they will be pumped out by a vacuum truck and hauled to a permitted disposal facility. Drilling muds, where possible will be reused at another Crownquest operated well.
- D. Pit liners: Pit Liners will be folded in and covered with a minimum of 3 feet of soil. No remnants of the liner material will be exposed when pit closure is complete.
- E. Sewage: Portable, self contained chemical toilets will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. Sewage disposal will be in accordance with Utah Department of environmental Quality (DEQ) rules and regulations regarding sewage treatment and disposal.
- F. Garbage and other waste material all garbage and non- flammable waste materials will be contained in a self contained, portable dumpster or trash cage. Upon completion of operations, or as needed, the accumulated trash will be hauled off-site to a Utah DEQ approved sanitary authorized disposal site. No trash will be placed in the reserve pit.
- G. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned up and removed from the well location. No potentially adverse materials or substances will be left on the location.

H. Any open pits will be fenced during the drilling operation and said fencing will be maintained until such time as the pits have been backfilled.

Producing Operations

Handling of produced water will be by the following methods.

A. Produced fluids- liquid hydrocarbons produced during completion operations will be placed in test tanks on the location. Produced water will be placed in the reserve pit for a period not to exceed ninety (90) days after initial production. After well is completed produced water will be stored in tanks on location and transported over existing field roads to an approved disposal well that services the field. A dike will be constructed completely around the production facilities designed to contain fluids (i.e... production tanks, produced water tanks, and /or heaters/ treaters). These dikes will be constructed of compacted subsoil, be impervious, hold 110% of the capacity of the largest tank, and be independent of the back cut. All loading lines will be placed inside the berm surrounding the tank battery.

Exempt & Nonexempt Wastes

Nonexempt Wastes: The method of disposal will need to be determined specifically to the type of waste being disposed of. Nonexempt hazardous waste will be disposed of in accordance with RCRA requirements. A common disposal method in the use of permitted offsite facilities

Exempt Waste: All exempt and nonexempt wastes will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment. Any spills of oil, gas, salt water or any other potentially hazardous substance will be cleaned up and immediately removed to an approved disposal site or landfill

Halls State 5-1 1940 FNL x 2080 FEL Sec. 5, T33 S, R 24E San Juan County, Utah

Surface Use Plan

1) Existing Roads

To reach the proposed location start from Monticello, Utah and go north on US Highway 191 approximately 4 miles to county road 332 turn east and travel approximately 2.75 miles to a 2 track dirt road turn right, at this point the proposed access road is flagged for approximately 1647 feet to the location. (Location Map)

2) Planned Access Road

The required new access road is shown on Location Map. The proposed route is flagged and approximately 1647 feet in length. The road surface will not exceed 40 feet in width. Grade of the road will be consistent with the local terrain. Upon completion of the project, the access road shall be adequately drained to control soil erosion. No water bars, culverts or turnouts are necessary.

3) Location of production facilities

In the event of production, anticipated production facilities are shown Plat #1. The proposed production facilities will be located on the drill pad.

4) Water Supply

Water for drilling and completion operations will be hauled by truck from the existing water well # 09-2151 located on the Jefferson 4-1 approximately 2910' east of the proposed Halls 5-1 Location. (Haul Route Map)

5) Source of Construction Materials

No additional construction materials will be required to build the proposed location.

6) Methods for handling Waste Disposal

The drill cuttings, fluids and completion fluids will be placed in the reserve pit. The reserve pit will be fenced on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves out. The reserve pit will be allowed to dry, and materials remaining in the reserve pit buried. The reserve pit will be backed filled, leveled and contoured so as to prevent any materials being carried into watershed. Reserve pits will be lined as required by the BLM, with 12 mil biodegradable plastic. All earthen pits will be constructed to prevent leakage from occurring and will not be located on a natural drainage. Upon completion, the pad will be leveled, contoured, and reseeded with the appropriate seed mixture.

All garbage and trash materials will be removed from the site for proper disposal. Generation of hazardous waste is not anticipated. Federal regulations will be adhered to regarding handling and disposal of such waste if it is generated.

Chemical toilets will be provided and maintained during drilling operations.

7) Ancillary Facilities

No ancillary facilities are planned.

8) Well Site Location

Location of drilling equipment, rig orientation, and access road approach is shown on Plat #2. A cross section of the drill pad with approximate cuts, fills and pad orientation is shown on Plat #3.

9) Plans for Restoration of Surface

After completion or abandoned of this well, the location and access road will be cleaned and restored to the original topographical contours as much as possible, and prepared for reseeding. Seed or plant mixtures and reseeding operation will be designated by the surface owner.

If the proposed well is productive, areas not used in production will be contoured and seeded with designated seed mixture. Production equipment will be painted the color designated by the surface managing agency.

10) Surface Ownership

The surface ownership is fee (private), administered by surface owner Mr. Gary Halls.

11) Other Information

Environmental stipulation as outlined by the responsible governmental agency will be adhered to. Refer to Cultural Resources Inventory of the Proposed Halls 5-1 submitted to Utah SHPO and SITLA.

12) <u>Lessee's or Operator's Representative</u> CrownQuest Operating, LLC. 303 West Wall Ste. 1400 Midland, TX 79702

13) Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan, are to the best of my knowledge, true and correct; and that the work associated with the proposed operations will be performed by D.J. Simmons, Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Robert R. Griffee
Operations Engineer

01/21/05

INFORMATION/CONTACT SHEET HALLS 5-1 WELL Section 5, T-33-S, R-24-E San Juan County, Utah

Surface Owner:

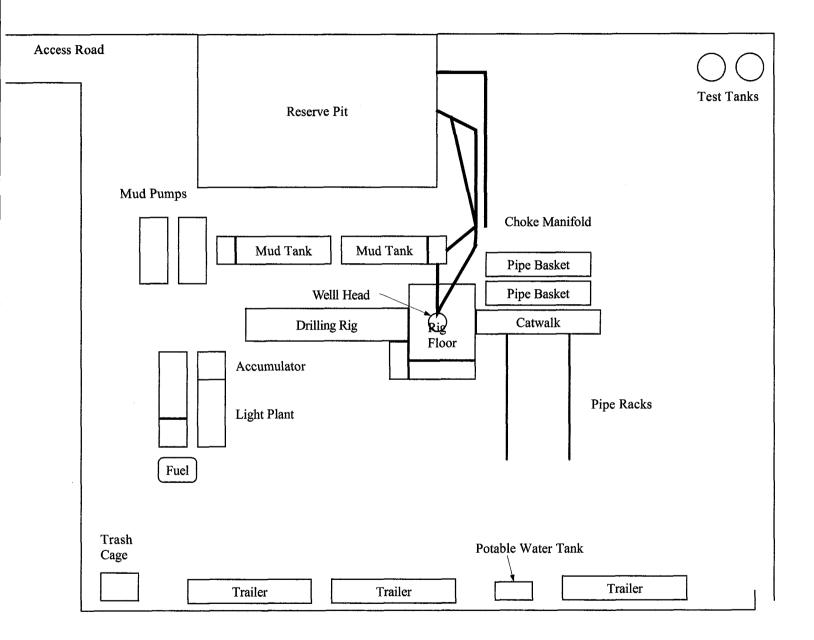
Mr Gary Halls P.O. Box 428 Monticello, UT

Phone: 435-587-2832 Contact: Gary Halls

Minerals:

CrownQuest Operating, LLC

303 Wall Ste. 1400 Miland, TX 79702 Phone: 432 685 3116 Contact: Tommy Lent

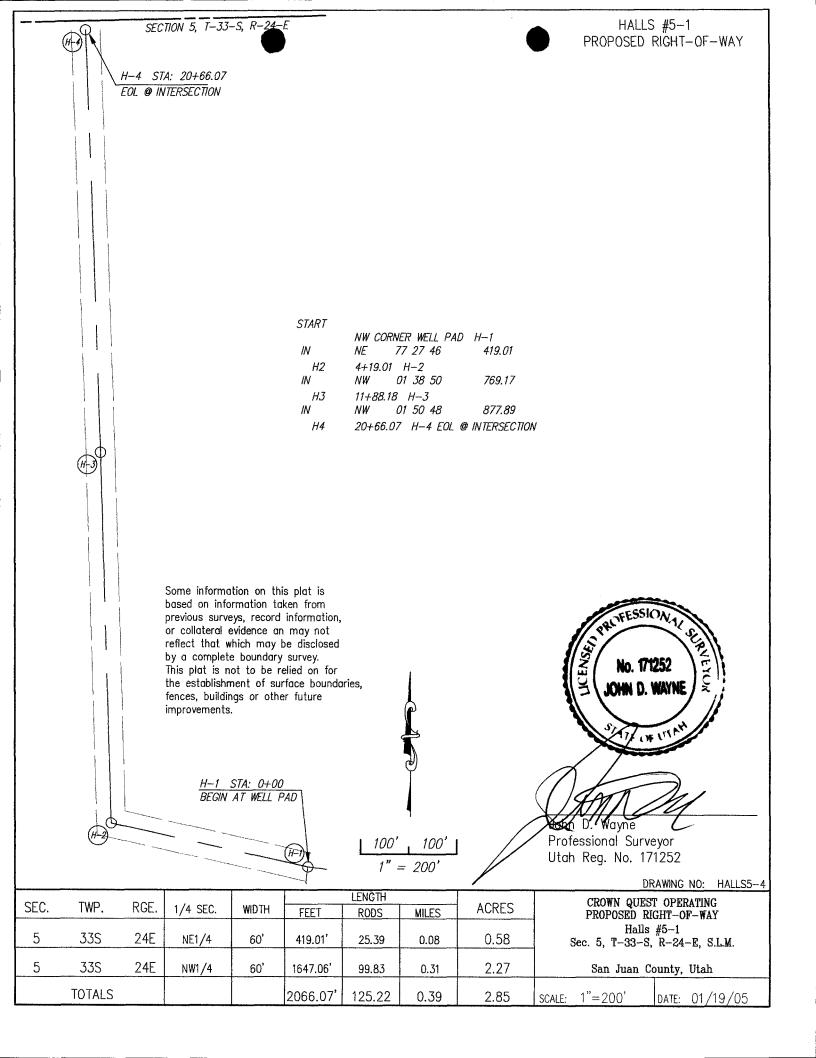


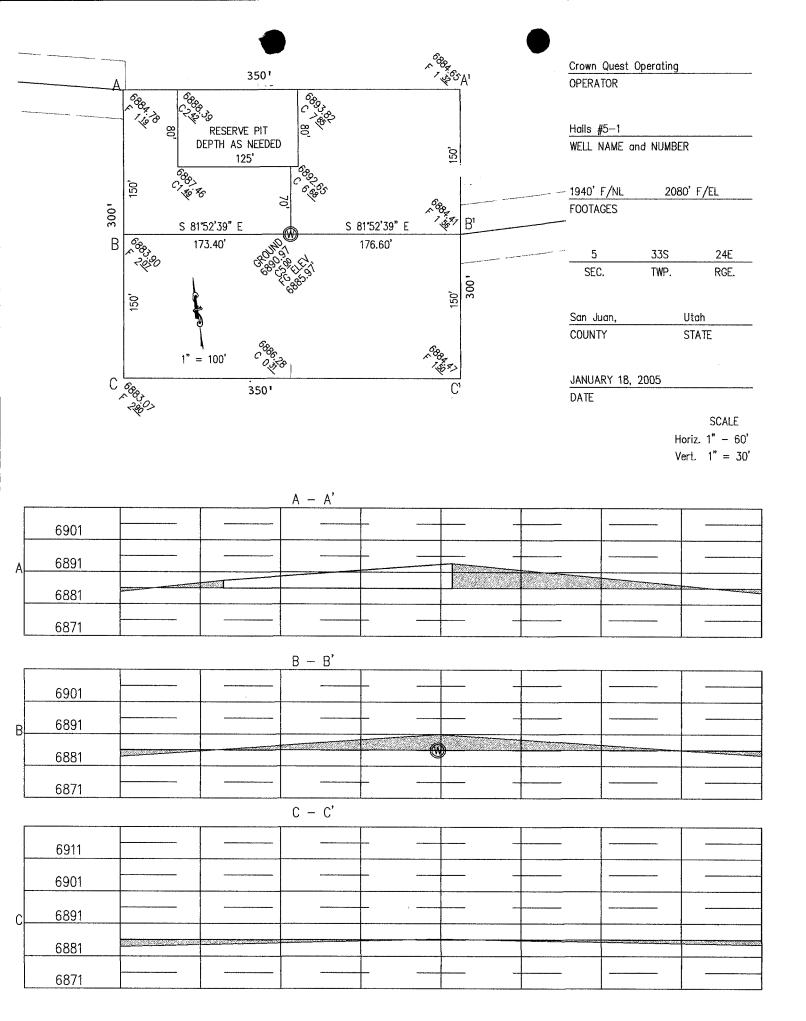
Halls State 5-1 Plat #2 - Drill Site Layout CrownQuest Operating, LLC.

1940' FNL x 2080' FEL Section 5, T33S, R24E San Juan County, Utah

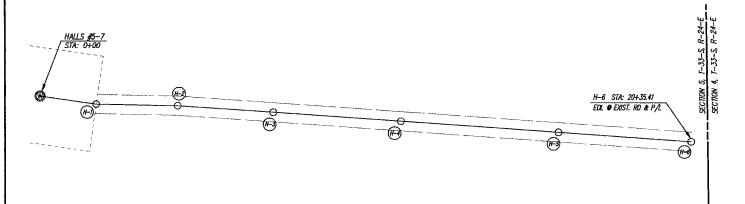
Approximate Scale; 1" = 50'

N





Plat 3



START		
	HALLS #5-7	
IN	SE 81 53 29	176.60
H1	1+76.60 H-1	
IN	SE 88 55 20	<i>254.26</i>
H2	4+30.86 H-2	
IN	SE 86 02 08	298.40
H3	7+29.26 H-3	
IN	SE 86 02 08	399.01
H4	11+28.27 H-4	
IN	SE 86 02 08	492.59
H5	16+20.86 H-5	
IN	SE 86 02 08	414.55
H6	20+35.41 H-6 EOL	@ EXIST. RD. & P/L

Some information on this plat is based on information taken from previous surveys, record information, or collateral evidence an may not reflect that which may be disclosed by a complete boundary survey. This plat is not to be relied on for the establishment of surface boundaries, fences, buildings or other future improvements.



Professional Surveyor Utah Reg. No. 171252

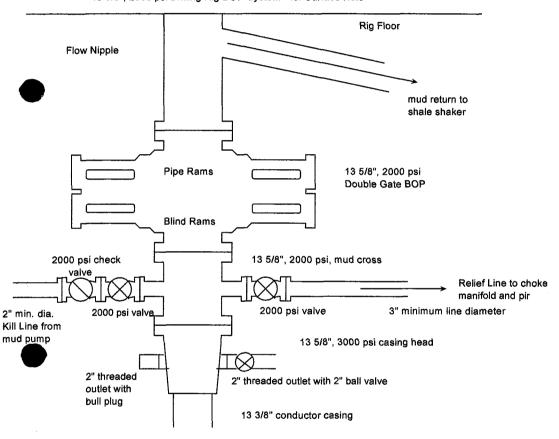
CROWN QUEST OPERATING PROPOSED WELL TIE
Halls #5-7 Sec. 5, T-33-S, R-24-E, S.L.M.
San Juan County, Utah

									DRAWING NO: HALLS5-
CEO	T) ((D)	חסר				LENGTH		40000	CROWN QUEST OPERATING
SEC.	TWP.	RGE.	1/4 SEC.	WIDTH	FEET	RODS	MILES	ACRES	PROPOSED WELL TIE
5	33S	24E	NE1/4	60'	2035.41'	123.36	0.39	2.80	Halls #5-7 Sec. 5, T-33-S, R-24-E, S.L.M.
								,	San Juan County, Utah
	TOTALS	···			2035.41	123.36	0.39	2.80	SCALE: 1"=200' DATE: 01/19/05



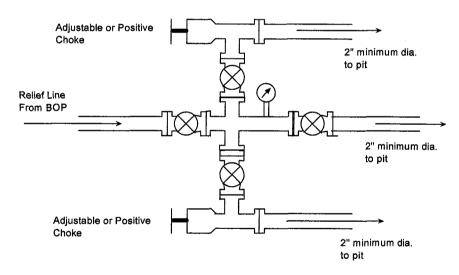
Figure 1

13 5/8", 2000 psi Drilling Rig BOP System - for Surface Hole



BOP Installation from Conductor Casing depth (250') to Intermediate Casing depth (2200'). 13 5/8", 2000 psi double gate BOP equipped with blind and pipe rams. All equipment rated at 2000 psi or greater working pressure.

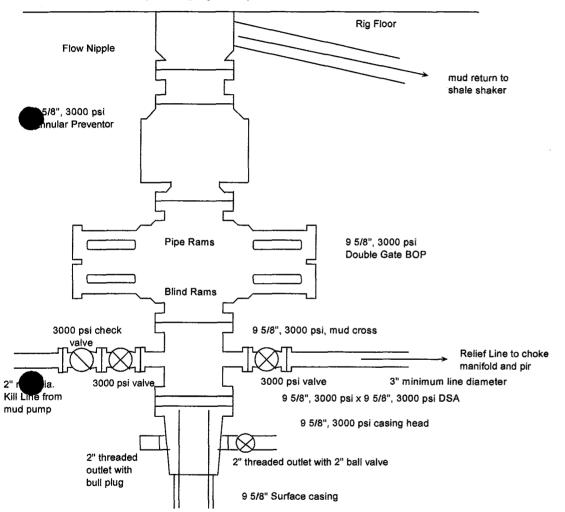
Figure 2



Choke manifold for BOP system shown in Figure 1. All equipment to be rated at 2000 psi or greater.

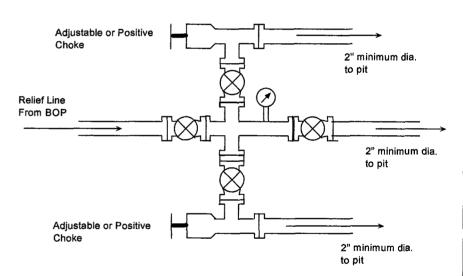
Figure 3

9 5/8", 3000 psi Drilling Rig BOP System



BOP Installation from Surface Casing depth (2200') to TD (6060'). 9 5/8", 3000 psi double gate BOP equipped with blind and pipe rams, 9 5/8" Annular BOP. All equipment rated at 3000 psi or greater working pressure.

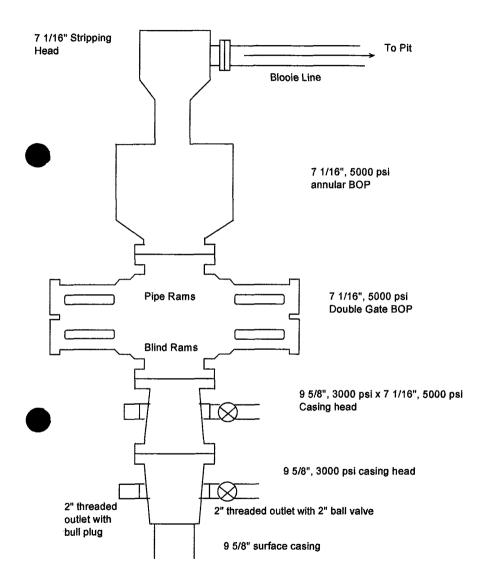
Figure 4



Choke manifold for BOP system shown in Figure 3. All equipment to be rated at 3000 psi or greater.

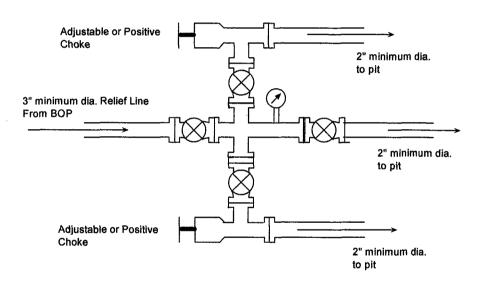
Figure 5

7 1/16", 3000 psi Completion Rig BOP System



BOP Installation for Completion operations. 7 1/16", 5000 psi double gate BOP equipped with blind and pipe rams, and annular BOP. All equipment rated at 5 000 psi or greater working pressure.

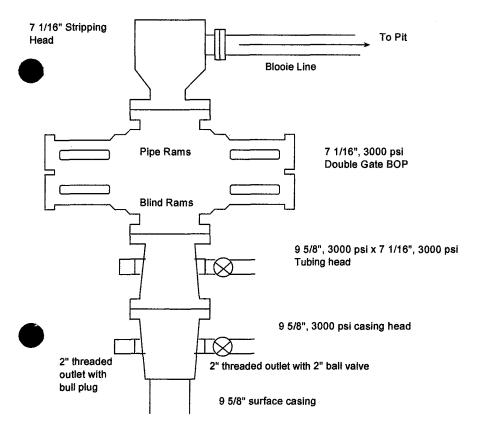
Figure 6



Choke manifold for BOP system shown in Figure 5. All equipment to be rated at 5000 psi or greater.

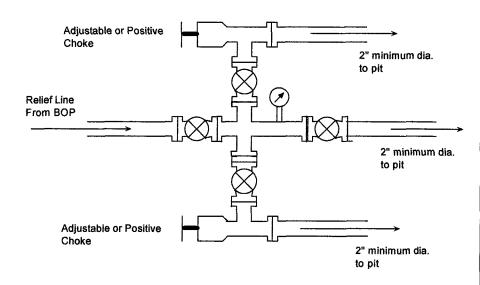
Figure 7

7 1/16", 3000 psi Completion Rig BOP System



BOP Installation for Completion operations. 7 1/16", 3000 psi double gate BOP equipped with blind and pipe rams. All equipment rated at 3000 psi or greater working pressure.

Figure 8



Choke manifold for BOP system shown in Figure 5. All equipment to be rated at 3000 psi or greater.

Utah Geological Survey comments on RDCC comments 4866 and 4869

4866. Division of Oil, Gas and Mining, Short Turn Around Project: Drilling Permit Sec. 5, T33S, R24E, San Juan County
Application for Permit to Drill - proposal to drill a wildcat well, the Halls State 5-1 on State lease ML-47962.

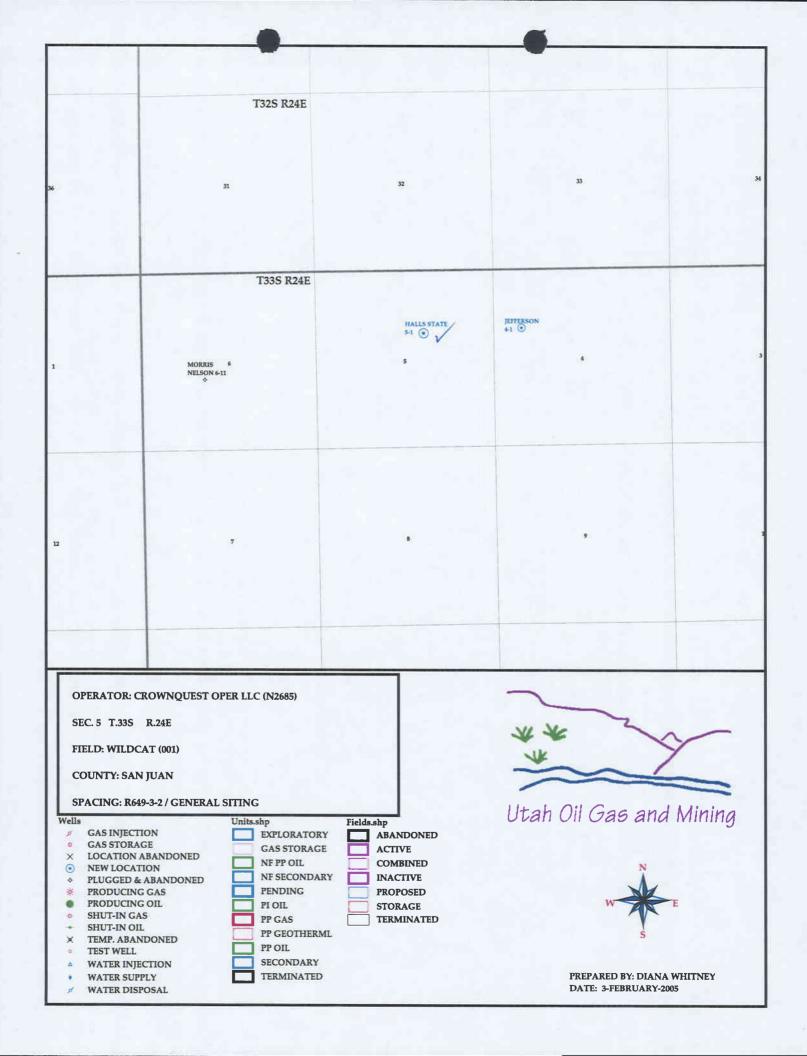
Although there are no paleontological localities recorded in our files for this project area, the Cretaceous Dakota and Burro Canyon Formations that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation by a qualified paleontologist be conducted for this project.

4869. Division of Oil, Gas and Mining Short Turn Around Project: Drilling Permit Sec. 2, T12S, R22E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well, the Buck Camp 2-2 well on State lease ML-47087

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation by a qualified paleontologist be conducted for this project.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 02/03/2005	API NO. ASSIGNE	ED: 43-037-318	33
WELL NAME: HALLS STATE 5-1 OPERATOR: CROWNQUEST OPERATING, (N2685) CONTACT: ROBERT GRIFFEE PROPOSED LOCATION: SWNW 05 330S 240E SURFACE: 1940 FNL 2080 FEL BOTTOM: 1940 FNL 2080 FEL SAN JUAN WILDCAT (1) LEASE TYPE: 3 - State LEASE NUMBER: ML 47962 SURFACE OWNER: 4 - Fee PROPOSED FORMATION: PRCAM COALBED METHANE WELL? NO	PHONE NUMBER: 43 INSPECT LOCATN Tech Review Engineering Geology Surface LATITUDE: 37.94 LONGITUDE: -109	BY: / Initials 4012	Date 3/9/05
Plat Bond: Fed[] Ind[] Sta[] Fee[] (No. Pla0007554) Potash (Y/N) Oil Shale 190-5 (B) or 190-3 or 190-13 Water Permit (No. 09-2151) RDCC Review (Y/N) (Date: 02/18/2005) Fee Surf Agreement (Y/N)	R649-3-3. E Drilling Uni Board Cause Eff Date: Siting:	General rom Qtr/Qtr & 920' Exception	
STIPULATIONS: 1- Spacing 2 - STA	(Stip	Basis	



STATE ACTIONS Recurre Development Coordinating Compain

Governor's Office of Planning and Budget 5110 State Office Building

SLC, UT 84114 Phone No. 537-9230

1.	State	Agency	
	Dunce	AZUMUY	

Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801 2. Approximate date project will start:

Upon Approval or February 17, 2005

3. Title of proposed action:

Application for Permit to Drill

4. Description of Project:

CrownQuest Operating, LLC proposes to drill the Halls State 5-1 well (wildcat) on State lease ML-47962, San Juan County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.

5. Location and detailed map of land affected (site location map required, electronic GIS map preferred)

(include UTM coordinates where possible) (indicate county)

1940' FNL 2080' FEL, SW/4 NW/4,

Section 5, Township 33 South, Range 24 East, San Juan County, Utah

6. Possible significant impacts likely to occur:

Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres — not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed.

- 7. Identify local government affected
 - a. Has the government been contacted? No.
 - b. When?
 - c. What was the response?
 - d. If no response, how is the local government(s) likely to be impacted?
- 8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable:
 - a. Has the representative and senator been contacted? N/A
- 9. Areawide clearinghouse(s) receiving state action: (to be sent out by agency in block 1)

 Southeastern Utah Association of Governments

10. For	further information, contact:	11. Signature and title of authorized officer
Phone:	Diana Whitney (801) 538-5312	John R. Baza, Associate Director February 3, 2005

ON-SITE PREDRILL EVALUATION Division of Oil, Gas and Mining

OPERATOR: CrownQuest Operating

WELL NAME & NUMBER: Halls State 5-1

API NUMBER: 43-037-31833

LEASE: State FIELD/UNIT: Wildcat

LOCATION: 1/4,1/4 SWNW Sec: 5 TWP: 33S RNG: 24E 1940 FNL 2080 FEL LEGAL WELL SITING: 460 F SEC. LINE; 460 F 1/4,1/4 LINE; 920 F ANOTHER WELL.

GPS COORD (UTM): X =648750 E; Y =4200318 N SURFACE OWNER: FEE

PARTICIPANTS

Bart Kettle(DOGM), Craig Starky (DJ Simmons), Ken Manchester (DJ Simmons), Gene Stevenson (Geologist).

REGIONAL/LOCAL SETTING & TOPOGRAPHY

Proposed location is ~6 miles northeast of Monticello, San Juan County, Utah. The immediate area surrounding the proposed well is agricultural land used for dry land farming. Location is staked on property owned by Gary Halls of Monticello. Access to this well will be along existing County maintained roads and approximately 1600' of newly constructed access across lands owned by Mr. Halls. Drainage is to the southeast with a majority of the terrain consisting of rolling hills with deep to moderately deep orange soils.

SURFACE USE PLAN

CURRENT SURFACE USE: Dry land farming

PROPOSED SURFACE DISTURBANCE: 300' x 350'

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: APD approved for the Jefferson 4-1

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: <u>Production facilities</u> such as separators, dehydrators, flow meters and tanks will be located on-site. The Sales Gas line will be installed to the east connecting into proposed pipelines for the Jefferson 4-1

SOURCE OF CONSTRUCTION MATERIAL: On-site

ANCILLARY FACILITIES: None required

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? (EXPLAIN): Drilling at this location is not expected to generate significant public concern.

WASTE MANAGEMENT PLAN:

Garbage and other trash will be contained in an acceptable trash container. Refuse will be transported to an approved sanitary landfill. Sewage will be handled in self-contained portable toilets and contents

hauled off location to an authorized facility in accordance with State and local regulations. Reserve pit will be fenced and lined with a 12-mil liner prior to use. Drill cuttings will be constrained in the reserve pit. Produced liquid hydrocarbons will be constrained in test tanks during completion and testing.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: No floodplains or wetlands will be affected by the drilling of this well. Proposed location is located above the head of an ephemeral wash, pad construction is not expected to alter drainage function or sediment load beyond current dry land farming practices.

FLORA/FAUNA: <u>Mule Deer</u>, <u>rabbits</u>, <u>songbirds</u>, <u>and raptors</u>. No vegetation due to dry land farming practices.

SOIL TYPE AND CHARACTERISTICS: Orange silty clay loam.

SURFACE FORMATION & CHARACTERISTICS: Predominantly rolling hills with deep soils, broken up by sandstone draws.

EROSION/SEDIMENTATION/STABILITY: Fine soils prone to wind and water erosion when disturbed. Excessive sedimentation and erosion is not expected to exceed current use.

PALEONTOLOGICAL POTENTIAL: None noted

RESERVE PIT

CHARACTERISTICS: 80'x125'x8'

LINER REQUIREMENTS (Site Ranking Form attached): Liner Required

SURFACE RESTORATION/RECLAMATION PLAN

As per surface use agreement

SURFACE AGREEMENT: Signed.

CULTURAL RESOURCES/ARCHAEOLOGY: Submitted to SITLA, project number U04-ZC1271.

OTHER OBSERVATIONS/COMMENTS

Request made that pit be fence on three side while drilling well and on the fourth side immediately following completion of drilling, due to the high probability for surface lands to be used for cattle grazing.

ATTACHMENTS

Photos of this location were taken and placed on file.

Bart Kettle
DOGM REPRESENTATIVE

February 11, 2005 3:50 P.M.
DATE/TIME

Auation Ranking Criteria and Ranking Score For Reserve and Onsite Pit Liner Requirements

Site-Specific Factors	Ranking	Site Ranking
Distance to Groundwater (feet) >200 100 to 200 75 to 100 25 to 75 <25 or recharge area	0 5 10 15 20	0
Distance to Surf. Water (feet) >1000 300 to 1000 200 to 300 100 to 200 < 100	0 2 10 15 20	2
Distance to Nearest Municipal Well (feet) >5280 1320 to 5280 500 to 1320 <500	0 5 10 20	0
Distance to Other Wells (feet) >1320 300 to 1320 <300	0 10 20	10
Native Soil Type Low permeability Mod. permeability High permeability	0 10 20	
Fluid Type Air/mist Fresh Water TDS >5000 and <10000 TDS >10000 or Oil Base Mud Fluid containing significant levels of hazardous constituents	0 5 10 15	5
Drill Cuttings Normal Rock Salt or detrimental	0 10	0
Annual Precipitation (inches) <10 10 to 20 >20	0 5 10	<u> 5</u>
Affected Populations <10 10 to 30 30 to 50 >50	0 6 8 10	0
Presence of Nearby Utility Conduits Not Present Unknown Present	0 10 15	0

Sensitivity Level I = 20 or more; total containment is required, consider criteria for excluding pit use. Sensitivity Level II = 15-19; lining is discretionary.

Sensitivity Level III = below 15; no specific lining is required.

____42 (Level __ I Sensitivity)

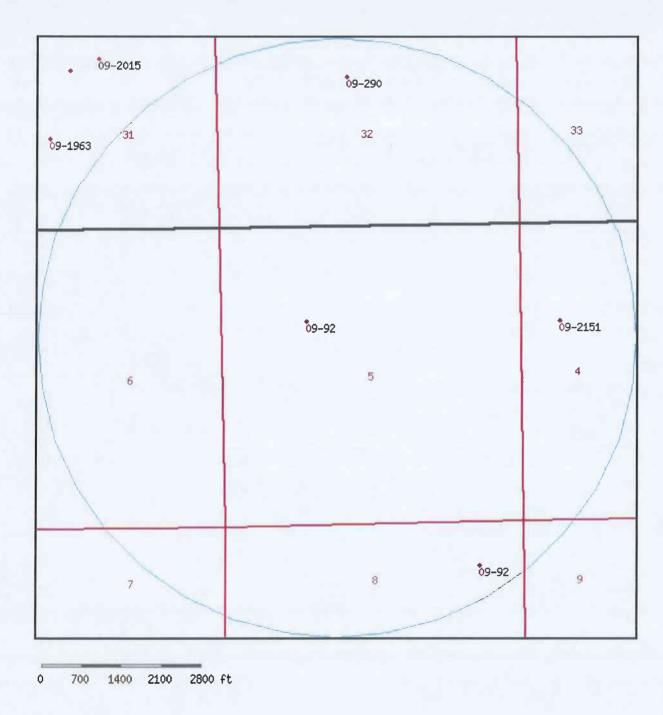
Final Score

WRPLAT Program Output Listing

Version: 2004.12.30.00

Rundate: 02/16/2005 04:29 PM

Radius search of 5280 feet from a point S1940 E2080 from the NW corner, section 05, Township 33S, Range 24E, SL b&m Criteria:wrtypes=W,C,E podtypes=S,U,D,Sp,P status=U,A,P usetypes=all



Water Rights

WR Number	Diversion Type/Location	Well Log	Status	Priority	Uses	CFS ACFI	Owner Name
<u>09-1106</u>	Underground	well info	P	19791011	DIS	0.015 0.000	MARIE ELLEN TUXHORN
	N2800 W49 S4 31 32S 24E SL						P.O. BOX 666
09-1963	Underground	well info	P	19970804	DI	0.000 1.450	NANCY L. SHEARIN
	N1612 W392 S4 31 32S 24E SL	_/				/	P.O. BOX 836
09-2015	Underground	well info	A	19990401	DIS	0.000 4.730	SCOTT MITCHELL AND CAROL VAN STEETER
	N320 W2060 E4 31 32S 24E SL						P.O. BOX 1151
09-2151)Underground		A	20041108	О	0.000 4.730	CROWNQUEST OPERATING LLC
-	S1720 E700 NW 04 33S 24E SL						303 W. WALL SUITE 1400
09-290	Underground		P	19630301	S	0.010 0.000	A CORPORATION REDD RANCHES
	S2625 E2380 NW 32 32S 24E SL						LASAL UT 84530
09-92	Surface		P	19490411	I	5.000 0.000	JOSEPH L. & LYMAN DEE REESE NIELSON
	N988 E1476 W4 05 33S 24E SL						BLANDING UT 84511
09-92	Surface		P	19490411	I	5.000 0.000	JOSEPH L. & LYMAN DEE REESE NIELSON
	S783 W785 NE 08 33S 24E SL						BLANDING UT 84511

Natural Resources | Contact | Disclaimer | Privacy Policy | Accessibility Policy

From:

Robert Clark Whitney, Diana

To: Date:

2/16/2005 10:00:37 AM

Subject:

The following comments are submitted in response to two (2) application to drill

proposal's: the Hai

The following comments are submitted in response to two (2) application to drill proposal's; the Halls State 5-1 wildcat well in San Juan county (RDCC #4866) and the Buck Camp 2-2 wildcat well in Uintah County (RDCC #4869). Due to the short turn around time involved, I am submitting comments directly to you rather than to Carolyn Wright at RDCC. The following comments are applicable to both applications.

Comments begin: The proposed well drilling project may require a permit, known as an Approval Order, from the Utah Division of Air Quality if any compressor stations are operating at the site. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Conservation Rule R307-400, Permits, Notice of Intent and Approval Order.

The proposed project is also subject to Utah Air Conservation Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules are found at www.rules.utah.gov/publicat/code/r307/r307.htm. **Comments end.**

Robert Clark Division of Air Quality 536-4435

CC:

Dave Mcneill; Wright, Carolyn

02-05 Crownquest Halls State 5-1

Operator:

CrownQuest Operating, LLC

String type:

Conductor

Project ID:

43-037-31833

Location:

San Juan

Design parameters: **Collapse**

Mud weight:

8.400 ppg

Design is based on evacuated pipe.

Minimum design factors:

Collapse: Design factor

1.125

Environment:

H2S considered? Surface temperature: No 75 °F

Bottom hole temperature:

Non-directional string.

78 °F

Temperature gradient:

1.40 °F/100ft

Minimum section length:

250 ft

Burst:

Design factor

1.00

Cement top:

Surface

Burst

Max anticipated surface

No backup mud specified.

pressure: Internal gradient:

79 psi 0.120 psi/ft

Calculated BHP

109 psi

Tension:

8 Round STC: 8 Round LTC:

Buttress:

Premium: Body yield: 1.60 (J)

1.50 (J) 1.50 (B)

1.80 (J)

1.80 (J)

Tension is based on buoyed weight. Neutral point: 219 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	250	13.375	48.00	H-40	ST&C	250	250	12.59	23.5
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	109´	740	6.783	109	1730	15.86	11	322	30.59 J

Prepared

Clinton Dworshak

by:

Utah Div. of Oil & Mining

Phone: 810-538-5280 FAX: 801-359-3940

Date: February 17,2005 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 250 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

02-05 Crownquest Halls State 5-1

Operator:

CrownQuest Operating, LLC

String type:

Surface

Project ID:

43-037-31833

Location:

San Juan

Minimum design factors: **Environment:**

1.80 (J)

1.80 (J)

1.60 (J)

Collapse Collapse: Mud weight: 8.400 ppg

Design is based on evacuated pipe.

Design factor 1.125 H2S considered?

No 75 °F Surface temperature:

Bottom hole temperature: 106 °F Temperature gradient:

Minimum section length: 250 ft

1.40 °F/100ft

Burst:

Design factor

1.00 Cement top: 687 ft

Burst

Max anticipated surface

No backup mud specified.

pressure:

1.980 psi

Internal gradient: Calculated BHP

Design parameters:

0.120 psi/ft

2,250 psi

Tension:

8 Round STC: 8 Round LTC:

Premium:

Body yield:

Buttress:

1.50 (J) 1.50 (B)

Tension is based on buoyed weight. Neutral point: 1,970 ft

Non-directional string.

Re subsequent strings:

Next setting depth:

Next mud weight: 9.500 ppg Next setting BHP: 2,990 psi 19.250 ppg

Fracture mud wt: Fracture depth: Injection pressure

2,250 ft 2,250 psi

6.058 ft

Run	Segment	0:	Nominal		End	True Vert	Measured	Drift	Internal
Seq	Length (ft)	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Capacity (ft³)
1	2250	9.625	36.00	J-55	ST&C	2250	2250	8.796	16Ó.2
Run Seq	Collapse Load	Collapse Strength	Collapse Design	Burst Load	Burst Strength	Burst Design	Tension	Tension	Tension
oeq	(psi)	(psi)	Factor	(psi)	(psi)	Factor	Load (Kips)	Strength (Kips)	Design Factor
1	982	2020	2.057	2250	3520	1.56	` 7 1 ´	394	5.55 J

Prepared

by:

Clinton Dworshak

Utah Div. of Oil & Mining

Phone: 810-538-5280 FAX: 801-359-3940

Date: February 17,2005 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2250 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

02-05 Crownquest Halls State 5-1

Operator:

CrownQuest Operating, LLC

String type:

Production

Project ID:

43-037-31833

Location:

San Juan

Design parameters: Collapse

Mud weight:

9.500 ppg

Design is based on evacuated pipe.

Minimum design factors:

Collapse: Design factor

1.125

Environment:

H2S considered?

No

Surface temperature: Bottom hole temperature: 160 °F

75 °F

Temperature gradient:

1.40 °F/100ft

Minimum section length: 1,500 ft

Non-directional string.

Burst:

Design factor

1.00

Cement top:

2,170 ft

<u>Burst</u>

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: 2,263 psi 0.120 psi/ft

Calculated BHP 2,990 psi Tension:

8 Round STC: 8 Round LTC:

Buttress: Premium: 1.80 (J) 1.60 (J) 1.50 (J)

1.80 (J)

Body yield: 1.50 (B)

Tension is based on buoyed weight. 5,193 ft Neutral point:

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	6058	7	23.00	L-80	LT&C	6058	6058	6.25	280
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	2990	3830	1.281	2990	6340	2.12	119	435	3 64 .1

Prepared

Clinton Dworshak

by:

Utah Div. of Oil & Mining

Phone: 810-538-5280

FAX: 801-359-3940

Date: February 17,2005 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 6058 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

02-05 Crownquest Halls State 5-1

Operator:

CrownQuest Operating, LLC

String type:

Production Liner

Location:

San Juan

Project ID:

43-037-31833

Design parameters:

Collapse

Mud weight:

10.500 ppg

Design is based on evacuated pipe.

Minimum design factors:

Collapse: Design factor

1.125

Environment:

H2S considered? Surface temperature:

No 75 °F

Bottom hole temperature: 213 °F Temperature gradient:

1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

1.00

Cement top:

6,000 ft

Burst

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: Calculated BHP

4,207 psi 0.120 psi/ft

5,393 psi

Tension: 8 Round STC:

8 Round LTC: **Buttress:** Premium:

Body yield:

1.60 (J) 1.50 (J) 1.50 (B)

1.80 (J)

1.80 (J)

Tension is based on buoyed weight. Neutral point: 9,268 ft

Liner top:

6,000 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth	Drift Diameter (in)	Internal Capacity
2			` '	D 440			(ft)		(ft³)
3	1600	4.5	11.60	P-110	LT&C	7600	7600	3.875	37.1
2	400	4.5	13.50	P-110	LT&C	8000	8000	3.795	10.7
1	1888	4.5	11.60	N-80	LT&C	9888	9888	3.875	43.8
Run Seq	Collapse Load	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
	(psi)	Strength (psi)	Design Factor	Load (psi)	Strength (psi)	Design Factor	Load (Kips)	Strength (Kips)	Design Factor
3			-					•	_
•	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(Kips)	(Kips)	Factor

Prepared

by:

Clinton Dworshak

Utah Div. of Oil & Mining

Phone: 810-538-5280

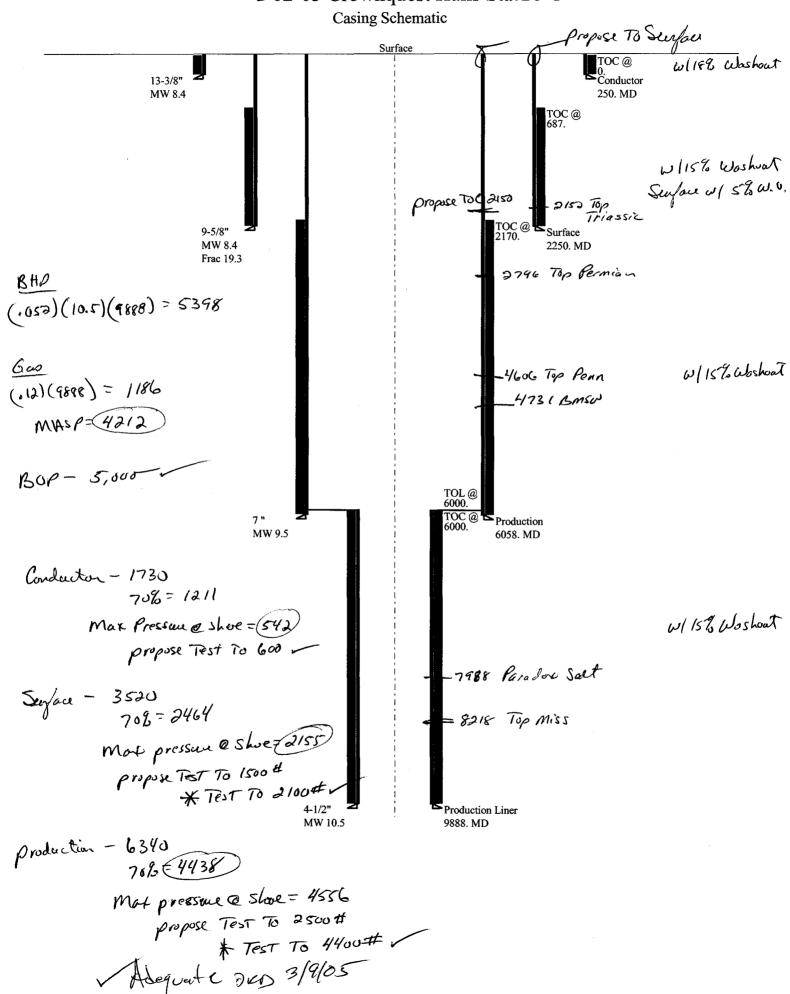
FAX: 801-359-3940

Date: February 17,2005 Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 9888 ft, a mud weight of 10.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

02-05 Crownquest Halls States-1



SOUTHEASTERN UTAH ASSOCIATION OF LOCAL GOVERNMENTS

DREW SITTERUD
CHAIRMAN

William D. Howell Executive Director



375 SOUTH CARDON AVE. P.O. DRAWER 1106 PRICE, UTAH 84501 (435) 637-5444 FAX (435) 637-5448

AREA WIDE CLEARINGHOUSE REVIEW

Federal Action Stat	e Action	SEUAOG	Approved	(x)Yes () No
				RECE	EIVED
Applicant Address:			•	FEB 2	
Oil, Gas and Mining		_			
1594 West North Temple #	1210			OF OIL GA	AS & MINING
SLC, UT 84114-5801		Name/Phone # Dia		ana Whitney 801-538-5312	
Title/Project Description Sec5,T33S, R24E, San Juan			······································	drilling phase loc	
	- County. Docum	on is approximat	ory one mile is	L of Kener Reserv	/UII.
[] No Comment [] See comment below					
Comments: Favorable	comment recomm	ended.			
Lorraine 1	Berefue	2/17/20	005		
SEUALG	U	DATE			



State of Utah

Department of Natural Resources

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

MARY ANN WRIGHT Acting Division Director

JON M. HUNTSMAN, JR. Governor

> GARY R. HERBERT Lieutenant Governor

> > March 10, 2005

CrownQuest Operating, LLC 303 Wall, Suite 1400 Midland, TX 79702

Re: Halls State 5-1 Well, 1940' FNL, 2080' FEL, SW NE, Sec. 5, T. 33 South, R. 24 East, San Juan County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-037-31833.

"Sincerely,

Jøhn R. Baza

Associate Director

pab Enclosures

cc: San Juan County Assessor

SITLA

Operator:	CrownQuest Operating, LLC		
Well Name & Number	Halls State 5-1		
API Number:	43-037-31833		
Lease:	ML-47962		

Location: <u>SW NE</u>

Sec. <u>5</u>

T. 33 South

R. 24 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. **Notification Requirements**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

3. **Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- Compliance with the Conditions of Approval/Application for Permit to Drill outlined in 5. the Statement of Basis. (Copy Attached)
- 6. Operator shall comply with applicable recommendations resulting from Resource Development Coordinating Committee review. Statements attached.

Page 2 API #43-037-31833 March 10, 2005

7. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.



Lieutenant Governor

State of Utah **DEPARTMENT OF NATURAL RESOURCES**

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA Division Director

May 15, 2007

Robert Griffee CrownQuest Operating, LLC 303 Wall, Suite 1400 Midland, TX 79702

Re:

APD Rescinded -Hall State 5-1 Sec. 5, T. 33S R. 24E

San Juan County, Utah API No. 43-037-31833

Dear Mr. Griffee:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on March 10, 2005. On April 5, 2006, the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective May 15, 2007.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

Environmental Scientist

14) lason

Well File

SITLA, Ed Bonner

